

Builders' Guide

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January 2, 1918

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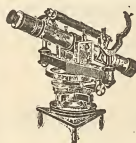
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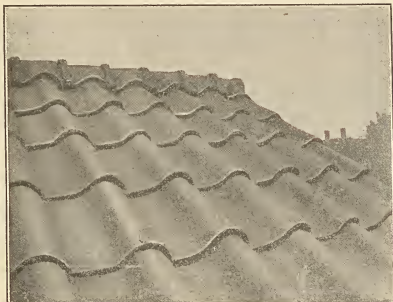
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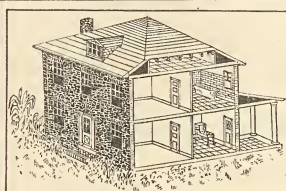


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BUILDERS' GUIDE

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BUILDERS' GUIDE

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As The Editor Sees It



WE have had much to say upon this page, within the past few months of the indisposition of the operative builder to resume his customary ante-belum activity. To just which one, among many contributing causes, to attribute this indisposition we have been at some loss to determine. Opinions have varied so greatly that it has not been easy to say, with any attempt at definiteness, what has been the primary cause for the operator's unwonted coyness in the face of an unmistakable demand upon all sides for housing accommodations.

A letter in a New York contemporary, from a widely known operative builder of that city may serve to make clear a few of the difficulties in the way of a resumption of activity as seen from the operator's own point of view. Writing on the subject of "The Building Situation" this operator, who signs himself "Speculative Builder," remarks:

"The prime difficulty of the speculative and investment builder to-day is obtaining the necessary funds for the consummation of his project. Next he is face to face with the question of obtaining prompt delivery of materials and supplies. This does not mean exclusively structural steel, although that commodity is in a worse position to-day than any other building essential. All, however, from common brick to finished hardware are subject to delays in delivery that discourage the builder who otherwise would be in a position to start a

contemplated improvement. The labor situation is the third item requiring adjustment before building times can again become propitious for the speculative or investment operator.

"The high cost of materials, although they are undoubtedly excessive, has not been the prime factor in hampering a more abundant building activity. The above factors are in the main responsible for the present stagnation and until there is a decided improvement along all of these lines, and not until then will it be possible for building interests to proceed. The movement so recently started is undoubtedly an excellent thing. The building trades are looking upon it as a last resort and if it fails there will not be much of an opportunity for the speculative builder until the war is over and conditions in all lines are again normal."

* * *

IF this statement of the situation is correct there would seem to be little reason,—aside from untoward weather conditions,—for any considerable prolongation of this hold-back policy. Deliveries, while still subject to some uncertainty, are daily becoming easier. The labor difficulty, at all times exaggerated, has so bettered, since the completion of the bulk of the cantonment contracts, as practically to dispose of this particular drawback. The writer's statement that the high cost of materials has at no time been a prime, hampering factor, removes that item from the pale of discussion. There is left, then,

assuming that "Speculative Builder's" deductions are correct, the difficulty of obtaining funds.

Why such a difficulty should be present at a period in the nation's history when money is so plentiful and the prospect of a remunerative profit so clearly assured it must be left to some one with a genius for the vagaries of modern finance to figure out.

With such a renting and selling demand as that which indisputably exists, not in any one given section, but in all sections and upon all sides, it is hard to understand why there should be any real trouble about obtaining unlimited funds for new building.

The objection, noted in these columns some weeks back, that structures erected at the present level of building costs would be certain to suffer a ruinous depreciation when brought into competition with buildings set up after the war and at lower price levels, while interesting, is not tenable.

To begin with, nobody is able to say with any certainty just when the war will end. In the second place, should the end come to-morrow, or next week, or next month, there is not the faintest basis for supposing that present price levels would be sensibly affected.

In the opinion of men whose experience has been such as to fit them to discuss the subject with authority, prices in all structural lines are up to stay. The chief factor in determining price levels is the factor of labor. Does any rational

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being suppose that wages can be driven back, in the years in the wake of peace, to the standards from which they started? They practice a fatuous order of self-deception who cherish any such thought. The advances labor has gained labor will unquestionably fight to retain. Even were this not the case the continuous heavy demand that is certain to ensue for American labor, and American material, with which to reconstruct the desolated areas of battle-ridden Europe furnishes a factor, in itself, that must assure the continuance for years of present price levels.

This being admitted, how is it going to be possible to build, in the period immediately in the wake of peace, at costs competitively ruinous to work done under war-time conditions. Some of our architectural readers describe these "build now" editorials of ours "superbly optimistic."

Is not optimism at this time the real need of the building industry?

* * *

THE few daring operators who, defying fate, building costs, freight congestion, the I. W. W., and kindred evils, have had the hardihood to plunge ahead and build within the past year have found sales at greatly augmented prices easier than at any previous period within the history of the trade.

It this proves anything it proves that the demand for new building is actual and insistent. Why, then, the persistent adhesion to the Gods of gloom and pessimism?

* * *

WHEN a week or two back an unfounded rumor went forth crediting the government with the intention to commandeer the sand supply of the country we threw up both hands in a gesture expressive of despair.

Do you know why? Can you guess why?

Because we have come to the conclusion that "sand," above all things else, is what the building situation stands in most need of: the kinds of "sand" that puts grit into the vertebrae not less acutely than the kind that is used to give body to mortar and to cement.

Are you acquainted with that little rhyme by Edgar A. Guest, of the *Detroit Free Press*, entitled "It Couldn't be Done"? If I were a builder, as matters now stand, I'd paste that bit of rhyme in such a place that I couldn't help seeing it at least once every day. This is it:

Somebody said it couldn't be done,

But he with a chuckle, replied,
That maybe it couldn't, but he would be
one

Who wouldn't say so till he tried.

So he buckled right in, with a trace of a grin

On his face. If he worried, he hid it.
He started to sing as he tackled the thing
That couldn't be done,—and he did it.

Somebody scoffed, "Oh you'd never do that;

At least no one has ever done it."
But he took off his coat and he took off his hat,
And the first thing we knew he'd begun it;

With a lift of his chin, and a bit of a grin,

Without any doubting or quit it,
He started to sing as he tackled the thing
That couldn't be done,—and he did it.

There are thousands to tell you it couldn't be done;

There are thousands to prophesy failure;

There are thousands to point out to you one by one,

The dangers that avail to assail you;
But just buckle in with a bit of a grin,
Then take off your coat and go to it;
Just start in to sing as you tackle the thing

That cannot be done,—and you'll do it!

* * *

I'D like to see the movement, now under way in New York City, to bring all the various interests of the building industry of the United States into one great, compact organization, pushed through to successful achievement. In times of stress like the present, when authority of a calibre altogether out of the ordinary is centralized at Washington, organization is of vital importance to industries with problems of transportation, labor and associated factors pressing for solution. At a time when so many other lines of endeavor are co-ordinated and articulate it is disquieting to find the building industry, one of the greatest of American industries in the volume of its annual expenditures, depending upon isolated units for such voice as it may find it necessary to lift upon issues bearing upon its present good and future well-being. If there was extant anything like the craft spirit that should obtain among the building trades, this New York movement would be nation-wide inside of a month. Organization is an absolute necessity of the times and it cannot be regarded as other than a subject for regret that there should be so evident an indisposition to recognize so salient a fact.

* * *

WE are indebted to the New York *Real Estate Record* for the subjoined "Summing up of the year in Building":

"With 1917 drawing rapidly to a close, conjecture is heard on all sides as to the building prospects for the coming year. During the twelve months just passed there have been many moments of doubt and difficulty for the majority of concerns in the industrial and commercial lines. From these deterrent factors it has seemed as though the building trades and its allied interests were among the chief sufferers. The building industry and the supply manufacturers that are dependent upon it, are conceded to be always among the first to experience the pinch of hard times. Economic disturbances, no matter how slight, are magnified to the trades. Response to bettered conditions is slow and the industry is usually the last to recover from the effects of a depression.

"During the past year the building industry has felt the effects of the uncertainty prior to the entrance of this nation into the war and more so from the hesitancy on the part of prospective builders to proceed with contemplated operations on account of our participation in the conflict. The bulk of the construction that has proceeded was an absolute requirement made necessary for the preparation for military activities. Private construction has slowed down to a negligible amount and although from time to time there has been a promise of improved conditions, it seems as though some new factor entered into the situation to postpone matters just as the future commenced to look brighter. Many and diversified were the influences that entered into the building situation during the past year and the majority of them exerted a depressing, if not disheartening, effect.

"Up to the present time the building trades, although suffering severely, have successfully weathered the many storms of adversity. Upon numerous occasions the outlook for the future was dark; obscured by depressing circumstances and conditions, but each time there followed a rift in the clouds of despondency that brought renewed hope to the industry.

* * *

DURING the past twelve months the building trades as a unit of industry have learned many things. In past years the various branches worked independently of each other and there was a decided lack of cohesion and harmony that proved to be a costly method of procedure when difficulties arose. With the vicissitudes of the past months there has come a growing necessity for a closer co-operation between all factors connected with the building industry. This co-operation is being brought about after considerable thought and diligent work on the part of the representatives of many of the leading branches of the industry and it has cre-

ated a feeling of responsibility toward each other that should redound to the ultimate benefit of the building fraternity and insure for the future a sounder business policy and closer harmony for one of the leading national industries.

"Building operations will unquestionably be resumed. The revival of activity cannot depend entirely upon the duration or outcome of the present war. There are altogether too many factors close at hand that will influence a resumption of structural activity in all parts of the country. It only requires a greater measure of confidence and hope on the part of the building fraternity and a willingness to wait for the time when conditions will resume the normal of past years.

"As representing one of the leading national industries let us not close this year bemoaning the difficulties experienced in the past. Rather we should look forward to the coming year with a confidence born of the new spirit of co-operation toward a future that undoubtedly contains much for all of the branches of the building industry."

* * *

WOULD you work as well and as cheerfully if your family lived in a hovel as you could if you all lived in a modern convenient home with a good chance for home ownership?" asks *Keith's Magazine*. "This is the question which the Industries are putting to the working man. Whether they are doing this in the spirit of brotherly love or as the practical solution of their increasingly difficult problems does not essentially influence the result. It is, nevertheless, true that the "Big Brother" idea has found a place in modern democracy.

"The rights of life and liberty were established by the Declaration of Independence. But it has remained for the twentieth century to declare the right of every family to decent housing and healthful homes as a necessary part in the pursuit of happiness.

"Under the cloud of war conditions, one great movement which has been increased when other projects have been completely dropped is that of the great housing plans, both governmental undertakings, notably those of Great Britain, and the work of the great industries which have done much in this country. The war has given a prominence to the necessity for good housing and the fact that it must become universal, a condition which in peace, we have striven for but not attained. The modern army is dependent on the industries at home, for war demands far more from industry than does peace, and the meeting of these demands is the price of the peace which is to come. Commercial interests are coming to better realize the relation be-

tween satisfactory home conditions and the highest efficiency which a worker is able to give. In order to get this efficiency, in greater demand than ever by the scarcity of labor, factories are providing good homes for their workmen.

* * *

THE fact that in these times of trenchment along some lines, even manufacturing concerns are expending vast sums on the housing of their employees, says more than mere words can express as to the need of each individual that he may give his family the advantages of a home. Especially is this true with growing boys and girls, so susceptible to the influences among which they are placed.

"The man who builds now will put unusual study on the plan to see that every

stick of timber and every hour of labor put into the construction shall do its full duty, that the house shall be so built as to reduce the upkeep, and even beyond these the mistress of the house must be assured—and should know of her own knowledge, indeed—that not an extra step shall be required in the keeping of the home."

* * *

It may have been a blue year,
The year that's passed away;
A nothing-much-to-do year,
A year whose skies were gray.

But what about the new year—
The year that lies before?
The just-in, up-to-you year—
That's knocking at your door?

EDITORIAL NOTES

The Portland Cement Association has recently opened a district office in the Metropolitan Bank Building, Minneapolis, Minn. This office will direct the work of the Association in Iowa, Minnesota, North and South Dakota.

* * *

The market in builders' hardware is fairly active and the future prospects are good. Prices are generally firm with but comparatively few recent changes. There is slight prospect of a downward revision in the prices of any of the hardware lines on account of the high cost of raw materials and the adverse labor conditions that still maintain.

* * *

George A. Fuller Company has been awarded the contract for the addition to the manufacturing plant of the Morgan Engineering Company at Alliance, Ohio. The estimated cost of the addition is \$1,000,000. The contract was signed on December 9, and construction began on the following day, December 10.

* * *

L. W. Weiss, architect, has recently moved his office from 91 Wayne street, Brooklyn, to 3 Hinman street, Middle Village, L. I.

* * *

Frank H. Smith, second vice-president and sales manager of the Lawrence Portland Cement Company, has been appointed Commissioner of Banks and Insurance of the State of New Jersey.

* * *

Dr. Thomas G. Darlington, former Health Commissioner of New York City, has been retained by the American International Shipbuilding Corporation to have direction of the sanitation at Hog Island, near Philadelphia.

* * *

Henry W. Hodge, former Public Service Commissioner of the First District of the State of New York, now serving with Gen-

eral Pershing, has been promoted to the rank of lieutenant colonel.

* * *

American Road Builders' Association will hold its fifteenth annual convention in St. Louis, Mo., during the early part of February, 1918. Further details of this meeting will be available for a later issue.

* * *

The Building Material Exchange of New York City, Elliott Smith, president, and William C. Morton, treasurer, leased space on the second floor at 30 East Forty-second street, New York City, for a term of two years and four months from January 1, 1918. The Exchange has been located for the past five years in the Woolworth Building, and the move uptown was made for the convenience of its members, so that they might be in the heart of the activities of the building trade.

* * *

Preliminary steps to organize the building industries of the United States on a war basis to aid the Government were taken at a conference of builders from New York, New Jersey, Pennsylvania and Connecticut. Announcement was made that an extension of the movement to other States would be sought. A telegram sent by the conference to President Wilson congratulated him on "the wise statesmanship displayed in protecting the credit of the country and its transportation system, so vitally necessary at this time."

* * *

Many architects and engineers who have had plans for new building operations on their boards are now inclined to hold these jobs in abeyance until next spring. There is a growing feeling that by that time many of the present deterrents to speedy and profitable construction will be eliminated and conditions generally nearer the normal. The transportation situation is bothering the lumber interests to a considerable extent, and as

a consequence of the bad traffic conditions the stocks on hand in the local yards are depleted. Prices are firm and no recession from the existing levels is anticipated.

* * *

The Architectural League of New York will hold its annual exhibition of architecture, sculpture, decorative and landscape design in the Fine Arts Building, 215 West Fifty-seventh street, from February 3 to February 23, inclusive. This is practically the most important showing of architectural and allied arts made in this country.

* * *

According to the records of the **Bridge Builders and Structural Society** it is shown that during the month of November 77 per cent. of the entire capacity of the bridge and structural shops of the country was contracted for.

* * *

American Concrete Pipe Association will hold its annual convention in Chicago, Ill., February 8-9, 1918. Secretary, J. H. Libberton, 208 South La Salle street, Chicago, Ill.

* * *

Continuation of bad weather conditions during the past week operated in subduing what little building progress was noticeable, and the close proximity of the holiday season has further influenced the situation. Although there have been announcements of some new work during the period, the volume is considerably less than for past weeks, and that fact is taken as an indication that there will be but slight activity until next spring.

* * *

Manufacturers of plate and window glass are greatly disturbed over the problem of fuel and raw materials and are anxiously waiting word from the Governmental authorities upon this important subject. Until this problem is definitely settled so that producers are able to proceed with some assurance that their operations will not suddenly be interrupted, there is no prospect of starting the fires in the plants. Up to the present writing none of the important manufacturers have started their blast and there is no prediction possible as to when operations can be commenced.

* * *

Chicago Cement Machinery and Building Material Show will be held in the Coliseum, Chicago, February 6-13. The show will be held under the auspices of the National Exhibition Company, 123 Madison street, Chicago.

* * *

American Society of Civil Engineers will hold its 65th annual meeting in the new headquarters of the organization, 33 West Thirty-ninth street, New York, Wednesday and Thursday, January 16-17, 1918. The business session will take place Wednesday evening.

* * *

Reports from various parts of the country indicate a general slowing down of large building operations. A growing volume of small work, however, will almost maintain the average of past weeks. In the Northern and Western part of New York State there

were a large number of industrial plants planned and there was a prospect that they would shortly be started. Some, however, have been held over until next spring, and others will be in abeyance indefinitely.

* * *

The granite produced in the United States during 1916 was valued at \$17,418,582, or 22 per cent. of the value of the entire stone output, according to reports recently made for the Government. This was a decrease of 3 per cent. as compared with the figures for 1915, and the lowest production recorded since 1904. Quarrymen generally reported adverse producing conditions, due to the use of cheap material, high wages, scarcity of labor, intolerable transportation facilities, excessive cost of fuel and explosives, and strikes.

* * *

American Concrete Institute will hold its annual meeting in Chicago, Ill., February 7 to 9, 1918. Secretary, H. B. Alvord, 27 School street, Boston, Mass.

* * *

American Institute of Consulting Engineers will hold its annual meeting in New York January 14, 1918. Secretary, F. A. Molitor, 35 Nassau street, New York City.

* * *

The Government building program remains as the most important factor in the current building situation. This applies not only to the local field or the Metropolitan district, but is general in all parts of the country. Many of the leading building contracting concerns are devoting almost their entire facilities toward the accomplishment of the Federal ambition to complete this work at the earliest possible moment and co-operating with them are the most prominent manufacturers of materials, supplies and equipment.

* * *

A most promising phase of the building situation is the amount of work to be undertaken by the State and county authorities during the coming year. Plans have been prepared for the construction of new roads, bridges, culverts, sewers, and similar work, and the total volume will be large enough to materially influence the contracting interests of the State. Some of the leading manufacturers and dealers in the material and contractors' supply lines are making plans for handling the business that will emanate from this source.

* * *

The speculative interests seem to have come to a realization that their duty in assisting in relieving the existing housing difficulties is plain, and many are perfecting their plans for an early start on contemplated improvements notwithstanding the numerous deterrents to structural progress.

* * *

Plans are rapidly being matured for alleviating the distress caused by the lack of housing facilities at many of the large manufacturing centers and particularly that existing as a result of the largely increased forces employed in the factories and plants making munitions for the Government. The Chamber

of Commerce of Elizabeth, N. J., is among the latest organizations to make provision for the augmented population in manufacturing cities and through its committee has appointed Murphy & Dana, architects of Manhattan, to prepare a general layout of the plot that will be utilized in providing for these workmen and their families.

* * *

By the agreement between the manufacturers and the Government the price for steel bars is now definitely set at \$2.90 per hundred pounds, mill base. This price is subject to revision after January 1, 1918. There is a considerable volume of business in this line by virtue of the growing popularity of reinforced concrete as a medium of construction for practically all types of buildings. There is a large demand current for the prosecution of the new Federal contracts, many of which call for reinforced concrete.

* * *

The market is active and with considerable new demand for both wire and wire nails. Some manufacturers report that they have already taken about all of the business they can safely accommodate for the present and temporarily are out of the market as sellers. Prices are firm at the Federal control figure of \$3.50 base, per keg, for wire nails in cargo lots and \$3.35 per hundred pounds for bright basic wire.

* * *

John Trageser Steam Copper Works, with factory and offices at 447 to 457 West Twenty-sixth street, New York, has been awarded contracts by the United States Government for a large number of their portable hospital baths and also for their Ralston water still. The company has been shipping them in large quantities to France and the Philippines, as well as to the various hospital bases in this country.

GAS ECONOMY NECESSARY.

The following letter has been addressed by President Samuel T. Bodine, of the United Gas Improvement Company, to Mayor Smith, directing attention to the urgency of care in the use of gas:

THE UNITED GAS IMPROVEMENT CO.

Office of the President.

Philadelphia, December 20, 1917.

Hon. Thomas B. Smith,
Mayor of the City of Philadelphia,
City Hall, Philadelphia.

Dear Sir: The Philadelphia Gas Works has manufacturing and distribution capacity sufficient to supply a population much greater than our present population with gas for lighting, cooking and water heating. We are not equipped, nor is any other artificial gas company equipped or expected to be, to supply fuel for heating the homes and business establishments of a city of the size of Philadelphia. Gas heating stoves are designed and installed for auxiliary and temporary heating only, not to take the place of house-heating plants.

Since the 1st of December gas consumption

in Philadelphia has increased 25 per cent. over the corresponding period of last year; on one day this month the increase was 36 per cent. over the same day last year.

We ask your co-operation in the enforcement of economy in the use of gas in municipal buildings; and with your permission we

will give copies of this letter to the newspapers, in the hope of securing the co-operation of all private consumers in conserving the city's gas supply.

Respectfully yours,
SAMUEL T. BODINE,
President.

MASONRY AND OUR ARCHITECTURE

One of the Italian commissioners on a war mission to this country, Signor Ariotta, made a plea before the Merchants' Association of New York that this country aid the allies in the most needed way by the building of ships. Signor Ariotta suggested that if we could "not furnish iron for both ships and for skyscrapers, we should for a time at least cease to build skyscrapers."

This has formed the text for an extremely interesting letter to the public press by Mr. Cass Gilbert, the eminent New York architect, who says:

"We have been perhaps extravagant in America in the use of structural steel for building work. There are hundreds of buildings erected in this country every year which could be just as well erected without steel, and in hundreds of others the amount of steel could be greatly reduced. An enormous tonnage could be saved if reinforced concrete, masonry, or other material was used. Practically all buildings of moderate height can be erected without the use of large quantities of structural steel. Reinforced concrete or old-fashioned masonry can take its place, and for a time at least we could well forego the erection of buildings of excessive height. The architects and engineers of America have ingenuity enough to meet our building problems along these lines if they must, and if the owners of prospective buildings will adapt their views a little to the practical conditions of masonry and concrete there is no reason why we should not in the end have even better and more substantial buildings for all structures of moderate height."

Mr. Gilbert then adds that he one time made the jesting suggestion that we might be forced eventually to destroy our skyscrapers in order to utilize the steel they contain in other ways. The time may come, he says now, and may not be far distant, when this prophecy, spoken in jest, will be realized.

Mr. Gilbert does not think it will be altogether a misfortune if we curtail our steel construction. He says: "Our architecture will not suffer for it, and if it did we can wait to remedy that. The greatest architecture the world has ever known was built of masonry and concrete. Vast spaces were vaulted, vaster, perhaps, than any we now build, and far more enduring. The Baths of Caracalla and of Diocletian, the Pantheon in Rome, the Dome of St. Peter's in Rome, the Mosque of Santa Sophia in Constantinople, all spanning great distances, were built of masonry. The great cathedrals in France and England were vaulted with masonry. Certainly no more dig-

nified and imposing buildings were ever built. The floor construction of the earlier buildings in our own country, such as the old section of the Treasury Department and the older portion of the National Capitol, was vaulted masonry. In Italy and France, in our own time, it has been the custom to construct floors of concrete or masonry vaulting, and should we return to these methods of construction we would develop an architecture more substantial and more imposing than anything that we can construct of steel.

"The use of the timber arch construction, as in the Boston Public Library, the Hall of Fame of New York University, the Cathedral of St. John the Divine of New York, the Capitol Building at St. Paul, and the elliptical 'rotunda' of the United States Custom House in New York, are examples of what can be done in wide-span construction, practically without the use of steel, the dimensions of the last-named vault being 86 feet in its minor axis and 126 feet in its major axis. A great number of other examples of recent construction, such as loft buildings, office buildings, warehouses, and factories from five to ten stories in height, have been erected entirely in concrete in various parts of the United States, and show that Americans can build and build well without structural steel. Viaducts, bridges across broad rivers, and culverts almost without number have been built in this country practically without steel. The great bridge of the Great Northern Railroad across the Mississippi at Minneapolis, that of the Pennsylvania Railroad at Harrisburg, the viaducts in the Borough of Queens, all of concrete or masonry.

"There are, of course, certain practical considerations of economy of space, which we cannot fulfill always quite as well in certain kinds of buildings without the use of structural steel, but there is no reason why our people should not change their requirements, if necessary, to meet war conditions, and if they are willing to do so it would be greatly to the advantage of architecture as a fine art."

Without energetic effort a man must remain in a rut and can never expect to share with his hustling, up-to-date competitor. Quoting the words of a gifted scribe: "Health attends the man who acts. Wisdom guides him. Hope frees him. Joy helps him. Power moves him. Progress marks him. Fame follows him. Wealth rewards him. Love chooses him. Fate obeys him. God blesses him. Immortality crowns him."

EXPANDING PRODUCTION OF METAL.

In a recent interview, published in the New York "Tribune," Judge Gary is quoted as saying that the United States Steel Corporation is now spending about \$12,000,000 a month for extensions, almost all for war purposes. The corporation is constructing two new shipbuilding plants, one on the Hackensack Meadows and the other on Mobile Bay. The corporation expects to build fifty ships, ranging in size from 9,600 to 18,000 tons. Judge Gary says the steel mills of the country are equal to the task of building 6,000,000 tons of shipping a year. He continues:

"The real problem in that connection is that of labor. The labor outlook is precarious. Considering the small amount of tonnage American yards have been putting out, it seems almost impossible to build 6,000,000 tons next year. But I have great faith in Chairman Hurley, of the Shipping Board. He is getting a great executive staff around him.

"We are continuously adding to our plants and equipment, not only to promote shipbuilding, but to contribute in many ways to the successful prosecution of the war. The new Liberty plate mill at Homestead was rushed to completion in six months, and is now turning out the plates for the ships the Federal Shipbuilding Corporation is building. It has a capacity of 150,000 tons a year.

"A short time ago Mr. Baruch came to me and said that the Government was greatly in need of increased forging capacity. This is a kind of work we had not been doing. We began work on forging plants the next day. We are greatly increasing our electric steel capacity, one plant being built at Gary and another at Carnegie.

"We are extending our structural steel capacity at Birmingham and are increasing our production at other places. Our production of coke is being greatly increased, not only for the coke, but also for such important by-products of great military value as benzol and toluol. To expedite the movement of our products we are building many freight cars. Some are being built for us, and we are erecting a car shop at Birmingham, where we are also putting up a fine new structural steel plant. We are doing things in every department."

The business man who grudges a commission to an advertising agent who thinks "he can do it himself" is usually about as intelligent as he would be if he grudged the commission of the architect and decided to build his store for himself.

If you've got a specialty that will commend itself to builders, make a contract for space and start right in and talk about that specialty. Dwell on its good points, point out its advantages over similar devices, set forth its dominant qualities. And keep right on, week after week talking about it. If you don't book orders we'll bet you a big red pipkin that there is either something better on the market or your specialty isn't worth a kopeck noway.

Advance Construction News

UNDEVELOPED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residence and Garage, near Queen Lane Station, Germantown. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owner's name withheld. Brick, frame and stone, 2½ stories, 28x50 feet and 19x13 feet, slate roof, hot water heating, electric lighting, tile and marble work, pine, oak and concrete floors, stone foundations. Architect taking bids, due January 7th. Wm. J. Grubler & Co., 219 East High street, Germantown; Hogg Const. Co., 1634 Sansom street; Thomas C. Trafford, 1613 Sansom street; W. O. Springer, 1624 Latimer street; Fesmire Bros., Glenside, Pa., and Frank C. Elvidge & Son, 5522 Germantown avenue, are figuring.

Store and Apartments, Fifty-sixth and Chester avenue, Philadelphia. Architects, Chas. W. Bolton & Son, Witherspoon Building, Philadelphia. Owner, Nelson Fry, Nineteenth and Arch streets, Philadelphia. Brick and stone, 3 stories, 55x75 feet, slag roof, hardwood floors (steam heating, electric work, plumbing, tile and marble work reserved). Architects have received bids.

Officers' Quarters, Frankford Arsenal, Philadelphia. Architect private plans. Owners, U. S. Government, Col. Geo. Montgomery, Frankford Arsenal, Philadelphia. Hollow tile and plaster, 2½ stories, 18x46 feet, slate roof, steam heating, electric lighting, tile work, tile and hardwood floors. Owners taking revised bids. Wm. Steele & Sons Co., 34 South Fifteenth street, are figuring.

Barracks (temporary), Frankford Arsenal, Philadelphia, No. 5804-A-B. Architect, private plans. Construction engineer, Edwin J. Benter, Frankford Arsenal, Philadelphia. Owners, U. S. Government, care of Col. Geo. Montgomery, Frankford Arsenal. Frame, 3 stories, 100x40 feet, ready roofing, pine floors, steam heating, electric lighting, roof ventilators. Owners taking revised bids. Wm. Steele & Sons Co., 34 South Fifteenth street, and Wm. R. Dougherty, 1610 Sansom street, are figuring.

Office Building (int. alts.), 925 Chestnut street. Architects, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owners, Federal Reserve Bank, 408 Chestnut street, Philadelphia. Consists of general interior alterations, new partitions, mill work, etc. Details not decided. Plans in progress.

Elevated Stations (4), Kensington avenue and Torresdale avenue and Kensington avenue and Tioga street, Contracts Nos. 535, 536. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit,

Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roof, 2 stories, 49x22 feet, and 3 stories, 63x30 feet, cement floors, electric lighting, tile, marble and terrazzo work, rolled steel sash, hollow metal sash and skylights, fire and hollow metal doors, iron stairs, ornamental iron work, hollow tile, metal lath, safety treads, roof ventilators, metal ceilings, wire work. Lowest bid submitted by Mitchell Bros., No. 535, \$55,570; No. 536, \$57,570.

Stable (alts.), changing to garage, 330 N. American street. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owners, Goldfine Bros. on premises. Consists of alterations necessary to change present building to garage, structural steel work, steam heating, cement floor and electric lighting. Owners are taking bids.

Store Building (int. alts.), southeast corner corner of Twelfth and Vine streets. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owner, Wm. H. Sternthal, on premises. Consists of general interior alterations. Plans in progress.

Warehouse (alts. and add.), 235 Dock street, Philadelphia. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owner, Louis B. Fortner, 36 Strawberry Place, Philadelphia. Brick and concrete, terra cotta trimmings, 4 stories, 25x100 feet, slag roof, new front, steam heating, electric lighting, tile work, hollow metal sash and skylights, fire doors, cement floors, metal lath, elevator, roof ventilators. Plans in progress.

Barracks (temporary), Frankford Arsenal, Philadelphia. Architect, private plans. Construction engineer, Edwin J. Benter, Frankford Arsenal. Frame, 3 stories, 100x40 feet, ready roofing, pine floors, steam heating, electric lighting, roof ventilators. Lowest bids submitted by Wm. Steele & Sons Co., \$23,989 and \$19,400; Wm. R. Dougherty, \$24,481 and \$17,210.

Oil House (alt. and add.), Frankford Arsenal. Architect (construction), Edwin J. Benter, Frankford Arsenal. Owners, U. S. Government, care of Col. Geo. Montgomery, Frankford Arsenal. Concrete and brick, 1 story, 32x18 feet, slate roof, rolled steel sash, fire doors. Low bids submitted by W. W. Anstine & Co., \$12,545, and Ketcham & McQuade, \$14,912.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" information for the Material Man and Interior and Exterior Fitter.

Store (alts.), 820 Filbert street, Philadelphia, \$2,000. Architect, private plans. Owners, Strawbridge & Clothier, Eighth and Market streets, Philadelphia. Consists of steel covering for elevator shaft and stair tower and tank support. Contract awarded to Stacy Reeves & Sons, 2011 Market street, Philadelphia.

Engine House and Equipment, 4517 Main street, Manayunk, \$3,500. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Glen Willow Lee Manufacturing Co., on premises. Brick and reinforced concrete, 2 stories, 55x75 feet, slag roof, steam heating, electric lighting, cement floors, fire doors. Contract awarded to the Brown Const. Co., 4600 Main street, Manayunk.

Storage House, Ruan street and Frankford avenue, \$6,500. Architect, Harry Zimmerman, 1208 Harrison street, Frankford. Owner, Her-

man Silberstein, 4258 Frankford avenue. Brick, stone and steel, 2 stories, 27x90 feet, slag roof, electric lighting, pine floors, hollow metal sash, fireproofing, wire glass. Contract for superstructure awarded to Harry Hetzel, 1500 Womrath street, Philadelphia.

Store and Dwelling, 323 South street, Philadelphia, \$4,000. Architect, private plans. Owner, J. Malis, 321 South street, Philadelphia. Mill work, plastering, new stairway, plumbing, consists of general fire repairs. Contract awarded to J. Gorchov, 4116 Girard avenue.

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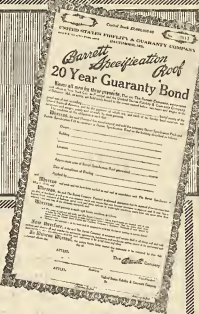
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In San Antonio, for example, the principal new buildings of the last year are shown here—three handsome schools, a power-house, a large grocery, a warehouse, a large publishing-building—and they all have Barrett Specification Roofs.

All of these roofs carry Barrett 20-Year Guaranty Bonds. The procedure is as follows:

The owner puts into his building specifications the clause, "The roof shall be laid according to The Barrett Specification dated May 1, 1916, and the roofing contractor shall secure for me the 20-Year Guaranty Bond therein mentioned."

Only competent roofers can obtain the bond and insurance

inspectors visit the job to see that the specification is followed.

On their certification of the contractor's due compliance with The Barrett Specification, the 20-Year Guaranty Bond is duly issued by one of the largest surety companies in America.

The bond costs the contractor and the owner nothing. It is issued in the interest of good materials and good workmanship, and we pay for it.

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The 20-Year Guaranty Bond is given on all Barrett Specification Roofs of fifty squares and over in all towns in the United States and Canada with a population of 25,000 and over, and in smaller places where our Inspection Service is available.

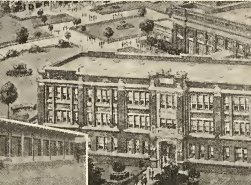
Our only requirements are that the roofing contractor shall be satisfactory to us and that The Barrett Specification of May 1, 1916, shall be strictly followed.

Further information and copies of The Barrett 20-Year Specification, with roofing diagrams, sent free on request.

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Illustrations, reading from top, are as follows:
Power-House of San Antonio Gas and Electric Co.; Roofers: Peter Roofing Co., Houston, Texas.
Lusk State School, Roofers: Turner Roofing & Supply Co., John Fess Brothers, Roofers.
Turner Roofing and Supply Co., Daily Express Building, Roofers: Turner Roofing & Supply Co.
Mary Avenue High School, Roofers: Henry Yodanis.
Furness Warehouse of San Antonio Brick and Terminal Railway, Roofers: Turner Roofing & Supply Co., Briggs Brothers High School, Roofers: Turner Roofing & Supply Co.

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WHEELBARROWS AND DRAG SCRAPERS

PENNSYLVANIA Construction News

Garage, Fifteenth and Howard streets, Harrisburg, Pa., \$12,000. Architects, Fahnestock & Raidabaugh, Patriot Building, Harrisburg, Pa. Owner, C. L. Conover, Holly and Hillside Road, Harrisburg, Pa. Brick and concrete, 1 story, 115x120 feet, slag roof, steam heating, electric lighting, cement floors, rolled steel sash, hollow metal skylights, roof ventilators. Architects will be ready for bids in one week.

Church, Twenty-first and Derry streets, Harrisburg, Pa. Architects, Fahnestock & Raidabaugh, Patriot Building, Harrisburg, Pa. Owners, Epworth M. E. Church, care of architects. Brick, 2 stories, 45x90 feet, slate roof, steam heating, electric and gas lighting, tile and marble work, hardwood floors. Plans in progress.

Club House, Front and Trowick streets, Steelton, Pa., \$10,000. Architect, C. H. Kain, 310 Chestnut street, Harrisburg, Pa. Owners, Steelton Lodge, Loyal Order of Moose, 22 S. Front street, Steelton, Pa. Brick, 2 stories, slag roof, electric lighting, steam heating. Architect taking sub-bids, due as soon as possible.

Garage, Ardmore, Pa. Architect, Frank Seeburger, Pennsylvania Building, Philadelphia. Owner, John W. Klemm, Ardmore, Pa. Stone and half timber, 1½ stories, 20x25 feet, shingle roof, cement floors. Plans in progress.

Residence (alt. and add.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, the Seybert Institute, 419 South Fifteenth street, Philadelphia. Stone, 2 stories, steam heating, electric lighting. Plans about completed. Architect will take bids in a few days.

Flour Mill, Trowick street, Steelton, Pa.

Engineer, E. E. Hollenback, 1804 Brandywine street, Philadelphia. Owners, John Hoffer Flour Mill Co., Steelton, Pa. Brick and frame (slow burning), 5 stories, 48x58 feet, slag roof, pine floors (lighting reserved), hollow metal sash, fire doors. Owner taking bids, due as soon as possible. E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia, is figuring.

Twin Bungalow, near Bethlehem, Pa. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owner's name withheld. Brick and hollow tile, 1½ stories, 32x50 feet, shingle roof, pine floors. Plans in progress.

Apartment House, 954 Jackson street, Allentown, Pa. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owner, H. J. Feldhege, on premises. Brick and hollow tile, 4 stories, 36x36 feet, slag roof, pine floors, electric lighting, dumb waiters. Owner taking bids. W. H. Gangewere, Allentown, Pa., is figuring.

Garage, Northampton street, Bethlehem, Pa. Architect, A. W. Leh, Post Office Building, South Bethlehem, Pa. Owner, Geo. Merdinger, Wilber Trust Co., South Bethlehem, Pa. Brick and hollow tile, 2 stories, 40x50 feet, slag roof, concrete floors, electric lighting, gasoline storage system. Owner will build.

Post Office, Sunbury, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Owners will take bids, due January 28th at 3 P. M. Plans and specifications may be obtained from custodian of site or Supervising Architect's office.

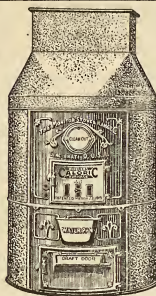
PENNSYLVANIA Contracts Awarded

Store Fronts (2), Easton, Pa., \$4,500. Architect, H. J. Wenzelberger, Easton, Pa. Owner, Detwiler Estate, Easton, Pa. Brick, 1 story, 52 feet front, tile and marble work, hardwood floors, metal bulks. Contract awarded to A. A. Bechtel, Easton, Pa.

Junior High School (Camp Curtin), Harrisburg, Pa. Architect, M. I. Kast, Commonwealth Building, Harrisburg, Pa. Owners, School Board of Harrisburg, D. D. Hammelbaugh, secretary, Harrisburg, Pa. Brick, 2 stories, 160x100 feet, composition roof, wood

floors (steam heating, electric lighting and plumbing reserved). Contract awarded to C. W. Strayer, Lemoyne, Pa.

Laundry Building (alts.) and **Gardener's Cottage**, Seyfert Farms, Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, the Seybert Institute, 419 South Fifteenth street, Philadelphia. Clapboards and mill work, plumbing, slate roof, pine floors, electric lighting, hollow tile, waterproofing and dampproofing (heating reserved). Contract awarded to Fesmire Bros., Glenside, Pa.



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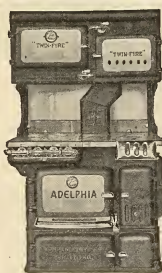
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NEW JERSEY Construction News

Residence (alt. and add.), Pleasantville, N. J., \$3,000. Architect, Seward G. Dobbins, 18 South Virginia avenue, Atlantic City, N. J. Owner, Terrence Smith, Pleasantville, N. J. Frame, 2 story addition, 16x40 feet, shingle roof, pine floors, hot water heating, electric lighting, tile work, pine floors. Plans in progress.

Hotel (add.), 140 South Tennessee avenue, Atlantic City, N. J. Architect, Seward G. Dobbins, 18 South Virginia avenue, Atlantic City, N. J. Owner, J. J. Joyce, Atwood Apartments, Atlantic City, N. J. Brick, 2 story addition, 16x30 feet, slag roof, pine floors, hot water heating, electric lighting. Owner taking bids. Yarman & Schenk, and S. Delinsky, both of Atlantic City, N. J., and Charles Corson, Linwood, N. J., are figuring.

Residence, Aberdeen avenue, Atlantic City, N. J. Architect, Harry Gordon McMurtrie, 1012 Walnut street, Philadelphia. Owner, Geo. F. Young, 3226 North Broad street, Philadelphia. Brick or hollow tile and stucco, 2½

stories. Plans in progress. Too early for details.

Telephone Exchange, Gloucester, N. J. Architect, private plans. Owners, Bell Telephone Co., 1230 Arch street, Philadelphia. Consists of general interior and exterior alterations. Brick, 2 stories, mill work, hot water heating, electric lighting, plumbing, plastering and painting. Owners taking bids, due January 3rd at 9 A. M. F. A. Havens & Co., 845 N. Nineteenth street; Wark-Yardley Co., 1737 Filbert street; F. L. Hoover & Son, 1023 Cherry street; A. Zellfelder, Broad and Walnut streets, Philadelphia, are figuring, in addition to those previously reported.

Residence, Springfield avenue, Ventnor, N. J. Architect, private plans. Owner, Raymond A. White, care of Stetson Hat Co., Fifth and Montgomery avenues, Philadelphia. Hollow tile and stucco, 2½ stories, composition shingle roof, hot air heating, electric lighting, tile work, parquetry and hardwood floors. Contract awarded to Edw. A. Crosta, Atlantic City, N. J.

stories, slate roof hardwood floors (heating and plumbing reserved), electric lighting. Architects have received bids.

Laundry Building, Washington, D. C. Architect, Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owners, National Laundry Co., Washington, D. C. Brick, 2 stories and basement, 60x70 feet, slag roof, cement and plank floors, gas lighting. Plans completed. Bids will not be taken until spring 1918.

Armory (add.), Milford, Del. Architect, Leon W. Crawford, Wilmington, Del. Owner, General Wickersham, Wilmington, Del. Brick and stucco, 1 story, asbestos shingle roof, pine floors, electric lighting. Architect and owner are taking bids, due as soon as possible. James Hiron, Dover, Del., is figuring.

Miscellaneous Contracts Awarded

Seamen and Gunners' Quarters, No. 2601, Washington, D. C. Architect, private plans. Owners, U. S. Government, care of F. R. Harris, Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete, steel, brick and stone, 3 stories, 185x58 feet, slag and asbestos roof, cement, composition and pine floors, steam heating, electric lighting, tile work, hollow tile, safety treads, hollow metal skylights, metal lath, roof ventilators, waterproofing, ornamental iron work. Contract awarded to Sumner Solitt Co., Pullman Building, Chicago, Ill., \$148,500; time, 100 days.

Range Finding Tower, Buildings Nos. 105-112, Washington, D. C. Architect, private plans. Owners, U. S. Government, A. L. Parsons, Acting Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete and brick, 5 stories, 34x60 feet, and Sixth street, 64x52 feet, slag roof,

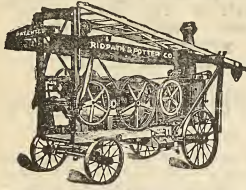
Miscellaneous Construction News

Post Office, Owego, N. Y. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Owners taking bids, the January 14th at 3 P. M. Plans and specifications may be obtained from cus-

tomian of site or Supervising Architect's office.

Residence, Twentieth and Van Buren streets, Wilmington, Del. Architects, Hope & Carlson, Ford Building, Wilmington, Del. Owner, Arthur Parsons, Wilmington, Del. Stone, 2½

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steam heating, cement and maple floors, hollow metal sash, hollow metal doors, iron stairs, hollow tile, metal lath, roof ventilators, wire work, ornamental iron work. Contract awarded to Richardson & Burgess, Inc., Washington, D. C., \$264,042; time, 165 days.

Liberal Arts Building, Wellesley, Mass. Architects, Day & Klauder, 921 Chestnut street, Philadelphia. Owners, Wellesley College, Wellesley, Mass. Brick, fireproof, 3 and 4 stories, 60x200 feet, limestone trimming, steam heating, electric lighting, cement floors, tile and terrazzo work, rolled steel sash, hollow tile,

elevator. Contract awarded to Edw. Corning Co., 52 Vanderbilt avenue, New York City.

Office Building (alts.), Wilmington, Del. Architect, private plans. Owners, Wilmington Steamboat Co., Wilmington, Del. Frame, 1 story. Contract awarded to H. D. Haddock & Co., Wilmington, Del.

Pier, Bulkhead and Wharf, Provincetown, Mass., \$150,000. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Provincetown Cold Storage Co., Provincetown, Mass. Timber and concrete piling, timber and steel. Contract awarded to Rendle-Stoddard Co., Chelsea, Mass.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Sale of uniforms, 533 Market street, \$1,350. Lamsdown Trust Co. (O), on premises. Bowers Bros. Co. (C), 1629 Ludlow street. Steam heating plant.

Factory, 141 North Third street, \$1,200. C. F. Hovegrove (O), Drexel Building, Evans Const. Co. (C), 9 South Eighteenth street. Fire repairs.

Garage, 1317 Watts street, \$600. Robert Patterson (O), 3348 North Fifteenth street. Brandts Son (C), 1037 Tioga street. New brick wall.

Store and Dwelling, 1801 West Buckwell, \$50. M. McNemery (O), on premises. Jas. A. Fitzgerald (C), 1623 Snyder avenue. Repair fire damage.

Garage, Eighth and Cantrel streets, \$1,700. Sol Hopkins (O), 1334 Arch street. H. Pearl (C), 155 South Sixtieth street. Steam heating plant.

Store and Dwelling, 801 Dickinson street, \$400. Frank Donato (O and C), 825 Moore street. New front.

Dwelling, 1031 Carpenter street, \$300. H.

C. Swartz (O), 932 Carpenter street. Domineo Marcantonio (C), 824 Catharine street. Alterations.

Dwelling, 2109 Seybert street, \$780. Women's Hospital (O), Twenty-first and North College avenue. A. G. Smith (C), 2135 North Sixty-third street. Frame bath room addition, 6x8 feet.

Storage Building, 928 North Third street, \$1,200. George Sachienlain & Co. (O and C), 141-145 North Third street. Heating plant, steam.

Engine Room, Parker street and Schuykill, \$3,500. Glen Willow Ice Co. (O), 4317 Main street. Brown Const. Co. (C), 4600 Main street. Brick, 1 story, 44x16 feet, slag roof.

Storage House, Ruan street, Frankford avenue, \$4,500. Herman Silberstein (O), 4258 Frankford avenue. Harry Hetzel (C), 1500 Womrath street. Brick, 2 stories, 27x62 feet, slag roof.

Factory, Columbia avenue and Mascher street, \$750. K. Donaldson (O and C), 5024 North Marine street. Brick elevator shaft,

7x7 feet inside, metal sash and frame fire doors and slag roof, metal skylight, 3 stories. Shop, 953 North Front street, \$300. Herman L. Winter (O and C), on premises. Boiler for steam heater.

Dwelling, 6620 Lincoln Drive, \$500. H. A. Riley (O), on premises. James N. Mitchell (C), Forty-sixth and Market streets. Porch enclosure.

Boarding House, 1513 Arch street, \$835. Harry LeBarre (O), 505 Chestnut street. F. L. Hoover (C), 1023 Cherry street. Fire repairs.

Storage Building, 1903 Catharine street, \$620. Mrs. Walter M. James (O), 320 Walnut street. F. L. Hoover & Sons (C), 1023 Cherry street. Fire repairs, slag roof.

Department Store, 820 Filbert street, \$200. Strawbridge & Clothier (O), Eighth and Market streets. Stacy Reeves & Sons (C), 2011 Market street. Tank support, steel over elevator shaft, and stair tower.

GREAT LOSS DUE TO LABOR TURNOVER

Construction of Houses for Workmen Will Minimize That Expense.

Figures collected by John Lind, assistant secretary of the National Lumber Manufacturers' Association, show that even before the war began certain employers lost millions of dollars annually because men, at that time, were also hard to get and hard to keep.

Henry Ford, in 1913, lost \$2,500,000 in hiring, fitting and firing 52,445 men to keep 13,000 men working, and the men lost \$454,000 in wages. This is a total loss for 1913 alone of nearly \$3,000,000.

A Pittsburgh corporation, with a steady payroll of 16,000 men, hired, fitted and fired 30,000 men in 1916, with a labor overturn of 187 per cent. A railway, in putting through some track elevation work in a large city, found it necessary to hire, fit and fire 2,874 laborers to keep a force of 400 men working for six months.

In the United States shipping yards the labor turnover is 500 per cent, according to figures by Meyer Bloomfield, expert for the United States Shipping Board. The inference from this condition is that the United States will have to follow the example of England and provide permanent as well as portable houses for workmen, particularly in the shipyard and munition districts.

Most plants hiring 2,000 men can well afford to set aside the sum of \$100,000 to finance homes for their workmen, according to Mr. Lind, in an address before the Executives' Club. The biggest leak on many balance sheets drawn up at the close of the present financial year, he says, will be found to be "labor turnover."

Of a variety of methods employed in reducing the tremendous loss due to labor turnover, the one that arouses the sentiment of the workman the most keenly is his love of home. When the workman is his own landlord he is a better workman than the tenant or "floater," and a better citizen as well.

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AWARD TO LOWEST BIDDER.

The wide discrepancy in bids for the construction of buildings has always been a matter of wonder or indignation to the uninitiated—of wonder, if he attributes to mankind motives of common honesty; of indignation, if he regards most men as rascals. Whatever his viewpoint, the discrepancy exists and remains a mystery.

It is a fruitful theme, one that is pressing upon the constructive intelligence of all factors actively identified with construction work. And distinctive progress is being made towards a solution. Among others, the Master Builders' Association of Boston has been vigorously discussing this question in its monthly letters of recent date. In its latest number Secretary William H. Sayward says:

"Owners and observers have been puzzled in estimates submitted by contractors and have remarked that there must be something wrong when figures submitted are so wide apart. The 'something wrong' is in the lowest-bidder principle. The contractor who bids extraordinarily low, in nine cases out of ten, does so because he is very anxious to get the work to enable him to carry his force of men along to meet the demands of some other undertaking, or he may have the less legitimate purpose of using payments that will be coming to him on the new work, to make up, bridge over, losses or retention of payments on other work he is just completing."

The continuance of unrestricted competition is not given approval by Mr. Sayward. The remedy suggested is to limit the competition to bidders of selective type. Says Mr. Sayward: "For work of either small or great proportions, the safe and sane method of procedure is to open bidding only to concerns that are qualified in every way to perform the work to be undertaken."



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IF you can keep the hot gases and smoke travelling back and forth inside a boiler long enough to extract the bulk of their heat, and still not make the draft sluggish; it's plain enough that less heat will go up chimney and more heat go into your radiators.

That back and forth action is what we call fire travel. It's this long fire travel in the BURNHAM Cosy Comfort Boilers that has a lot to do with making their short coal bills.

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HIGH PRICES NO REASON FOR CONSTRUCTION CURTAILMENT, ACCORDING TO MR. SCHWAB

Perhaps the most important duty of architects and engineers at present is to study carefully the probable duration of the present era of high prices, for upon the advice of architects and engineers will largely depend the extent to which construction programs will be curtailed or expanded. Oftand it seems probable to most men that there will be a marked fall in the general level of prices as soon as the war ends. If this is to occur and if the war is to end soon, it may be wise to reduce some construction programs. But let us be quite sure of our premise that average prices will drop after the war before we adopt a policy of curtailment.

In a recent address "the great iron master," Mr. Charles M. Schwab, said:

"Let me tell you something of the experience of the Bethlehem Steel Company. Last year we entered upon a constructive program involving expenditure for the next few years of about \$100,000,000. Many of our friends urged us to go slowly and wait until all costs should be reduced. But we believed that when facilities were needed they ought to be provided, and that a manufacturer should not speculate upon what he might be able to do in the future. He should do it now. That was the largest construction undertaking, I believe, ever entered upon by a single corporation."

"Costs are very much higher now than they were then. They promise to be very much higher in the future. But by beginning when we did we were able to greatly increase our facilities, so that they are available now, when they are so supremely needed in the interests of national defense."

"Bethlehem steel is to-day putting \$20,000,000 into plants entirely for the use of the Government."

It will be noted that this executive of recognized foresight and courage had to overcome the objections of his associates a year

ago when he wanted to embark on a large construction program. To his associates a hundred million dollars for new plants looked like an unwise investment to make during an "era of high prices." But to Mr. Schwab it was apparent that prices would not soon recede and would probably go higher. Moreover—and note the general significance of this—Mr. Schwab regarded it as a public duty to enlarge his plant, regardless of the personal profit that might or might not accrue.

Shall civil engineers, also charged with public duty, show more timidity than such industrial captains as Mr. Charles M. Schwab? asks "Engineering and Contracting." Shall civil engineers haggle over contract prices for public works and advise curtailment of construction programs in the very hours that the country keenly needs the best and most of every kind of public plant—railways, roads, streets, sewers, waterworks, what not?

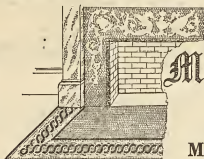
There are some engineers who are acting with less breadth of vision, less courage, and, we fear, less ordinary common sense than are to be expected of educated men. They are not even studying the industrial history of our Civil War, which has thus far paralleled the history of this war in most respects.

Our Civil War gave a remarkable impetus to production and coincidentally it caused a great rise in prices and wages. It was followed by eight years of high prices—until the panic of '73—and wages never receded, except in spots and temporarily.

The great war now in progress is disabling and killing millions of men, very many of whom would have normally emigrated to America. Even more effective as a deterrent to emigration will be the higher wages that the war has caused in Europe. That European wages will not fall after the war seems certain, for the workmen are earning them as a result of their greater productivity.

No future economic condition is more assur-

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ed than that wages will not recede after the war, both in America and in Europe. Indeed, it seems more probable that they will continue to rise indefinitely. If this is likely—and leaders like Mr. Schwab think so—where is the logic in the reasoning of civil engineers who advise restriction in construction on the ground of present high prices?

Steel, it is true, has reached a price from which it is likely to decline; but when one reflects to what a small extent the price of steel affects most civil engineering works, it is clear that even a great drop in steel prices will have only a minor effect on the average cost of public works.

Let civil engineers now, if ever, give evidence both of the faith that is in them as to our economic future and of the broad knowledge of economic conditions that they are presumed to possess.

PROMOTING THE FLOW OF CONCRETE IN PIPES AND FORMS.

In the \$3,500,000 Twin Peaks tunnel, recently completed in San Francisco, the contractors, R. T. Storrie & Co., were successful in conveying concrete 4,000 feet through an 8-inch pipe by the pneumatic placing process.

This concrete was mixed with hydrated lime added for a lubricant which acts through its ability to hold water and prevents segregation, thus allowing the concrete to be mixed wetter than would otherwise be satisfactory.

In a recent letter to Mr. Pierre N. Beringer, publicity manager of the Ransome Concrete Machinery Company, Mr. M. M. O'Shaughnessy, city engineer of San Francisco, under whose direction the tunnel was constructed, wrote: "I believe the conveyance of concrete by pipe is a great achievement and the interesting part of the work is that it carries up-

hill on a 3 per cent. grade better than on the down grade. The reason for this, I presume, that the material acts like a wad in a gun and is pushed forward in a mass on the uphill grade, whereas on the downhill grade it is scattered.

"Experiment at other points in the mixing and placing by the use of pneumatic machinery has demonstrated the value of the use of hydrated lime beyond a doubt both as on aid in reducing friction in transit of the aggregates as well as improving the quality as to waterproofing."

MAKE A BUILDING CAMPAIGN.

We are all ready to make whatever sacrifice is necessary for the benefit of war needs, but somehow we have been impressed lately that too much thought has been turned to the idea of sacrifice and not enough to that of making a hustle, of making business good all around, so that we won't need to make a sacrifice. It were better to make a campaign for building, to put forth unusual energy that we may benefit internally and materially, as well as benefit the world morally and socially.

Already many people in the country are realizing there is too much hysteria of saving and sacrifice and that many lines of industry and business are suffering in consequence. Broadly speaking, it should be one of the busiest business years on record, and years of this kind are great years in which to turn attention toward building, toward the erection of homes that will be a matter of pride and satisfaction in the future, and to general up-building, that we may be going forward and not drift backward.

Already in some cities organizations have been formed of architects, building contractors, material men and others to promote the

idea that it is a splendid year for building operations, and the fact of our being at war should not put a stop to this work. Some materials are high, it is true, and labor is scarce, but this is a condition which promises to prevail indefinitely. If the war ends there will be a great rebuilding in Europe, which will serve to keep the price of material up for years, according to the prediction of the best authorities. So waiting for the price to come down is poor business, especially since when prices come down they bring depression and poor profits. Business profits, wages, and everything else are better than usual this year, and these things offset the higher cost of material, consequently it is just as logical to urge building now as at any time. So let us get busy, each man in his own community and each group together, and make a campaign for spring building, to the end that we may all be busier and better off.—"The Clay Worker."

COMPETITIONS.

By W. Jones Cuthbertson, Architect.

Here are a few remarks about competitions, notwithstanding the threadbareness of the subject:

The prevalent idea of a competition is based upon an entirely fallacious premise.

This idea that a competition is to show off fine draftsmanship and simply to lay off a plan following a preconceived idea issued by the callers of the competition, is erroneous.

The *raison d'être* for a real competition is that the callers want to get ideas for accomplishing the best results.

For if they simply want neat drawings worked out according to instructions, would it not be better and cheaper to employ a capable young draftsman just out of technical school?

And if they want an architect to work out a plan already settled upon, the most economical way would seem to be to select a well recommended one to put into workable technical shape the plans which they have agreed upon.

But if they want ideas then have a free and open competition, and let the ideas be given them by anybody—a farmer, a tailor or a cook—what does it matter as long as they get them?

Of course they would not agree to employ such an one to do the technical work necessary to build the structure; but they pay for his ideas and for the impartation of those ideas to the technical man employed to work them out.

Where there is more than one equally good solution of the problem advanced, a second competition becomes necessary, so as to allow the authors to work out their ideas in detail. Of course, for this they are to be paid.

All this elaborate stuff about secret competition is a sham and the making of hard

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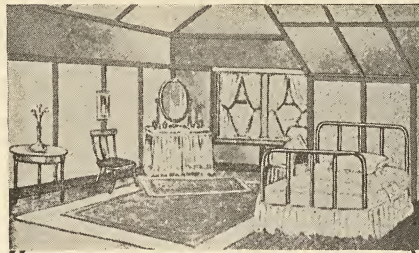
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and fast instructions for the conscientious, to be broken by the winner, is silliness and injustice.

As to judging of the most useful idea, I should say let all the competitors—as those who have naturally studied the problem most carefully—vote on what they think is the best idea outside of their own; this would be

somewhat of a guidance to the judges who should be those who are going to use the building most of the time; who naturally know their wants best and can fully appreciate the ideas given them.

This method may possibly be abused as much as the one now in vogue; so these thoughts are only put forth as a sketch.

AMERICAN MANUFACTURE OF CREOSOTE

Owing to the decrease in shipments of creosote from England and Germany, whence came all but a small part of the imported oil used by wood preserving plants in this country before the war, American manufacturers have taken steps which, says a report compiled by the forest service, it is estimated will largely increase production of the domestic article. The imported oil ordinarily forms about 65 per cent. of the total used in the United States, where creosote is the most important wood preservative.

The statistics gathered show that wood preserving is one of the most rapidly advancing industries in the country.

There is abundant evidence of the long life of creosoted wood. Even in this country there are many example of poles and other timbers creosoted 20, and even 30 years ago

which to-day are apparently as sound as when first set in the ground. In Europe, where wood preservation is an older industry the results are still more marked. The first successful wood preserving plants in the United States were built about 1870.

Wood Preservation.

Whether any wood is durable or not depends not so essentially on the kind of wood as to conditions of its manufacture, seasoning and use. No hard and fast lines can be drawn. Heartwood is usually much more resistant to decay, according to R. S. Kellogg, the wood expert, while sap wood, since its cells are more open, usually absorbs wood preservatives better than heartwood.

Timber of naturally durable woods which is not seasoned before it is used or which contains a large amount of sapwood may rot

quickly, while properly handled timber of less durable woods may last a long time.

The decay of timber is caused by minute organisms called bacteria and fungi. They feed upon wood and change it as completely as the digestive processes change the material upon which the higher forms of life feed. Sapwood is more liable to decay because it contains much more food for bacteria and fungi than does heartwood. This is true because the sapwood is the vital part of the tree. As the cells become older their functions are assumed by the newer ones close to the bark and the living matter of the older cells nearer the heart of the tree, is gradually changed by deposits of mineral or other matter, generally of darker color.

Decay of timber is prevented by treating with antiseptics which are poisonous to bacteria and fungi. Practical considerations make only a few such substances suitable for commercial use. A first essential of a good wood preservative is that it shall not dissolve out when the wood gets wet or is placed in water. For this purpose the best material thus far discovered is creosote.

Paint lengthens the life of wood because it keeps out moisture and closes openings through which fungi might enter; but it is essential that wood be well seasoned before it is painted.

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

COLUMBUS PREPARING FOR REAL ESTATE AND BUILDING SHOW.

Much interest is being taken in the Building Show, to be held at the State Fair Grounds January 21 to 30, under the joint auspices of the Columbus Real Estate Board and the Builders' and Traders' Exchange. Three buildings will be filled with exhibits, 53,000 square feet being required to care for the demands which are being made for space.

In connection with this building show the management has prepared a careful review of building conditions, which indicate that building material, even at the advanced price of to-day, is cheaper than it will be for years to come.

"Everything points to higher prices for all kinds of building material," says L. C. Vinson, manager of the mid-winter exposition, "and we are trying to impress upon those who contemplate building that now is the time to get at it. Prices are going higher; and no better investment can possibly be found than in the erection of homes."

In connection with the building show, a miniature design of a prize moderate priced dwelling will be on exhibition. The Builders' and Traders' Exchange have offered a cash prize for the best designed moderate priced house, the field being open to architects in every State of the Union. The award was made early in December, and just as soon as possible an exact reproduction of the house, even to including the yards, shrubbery, etc., will be erected, so that prospective builders may get a better idea of what the house is when completed.

HOUSING EXPERIMENT IN ROME.

Unique Italian Construction Surrounding Quadrangle and Containing Many Novel Features.

One of the successful experiments in new types of industrial and urban housing is that which has been made by the Italian Good Dwellings Society, in Rome. The Italian Society, says a recent report on the experiment, has erected a block of working-class flats containing 800 dwellings, designed for all types and sizes of families. The flats are built on four sides of a square, with a garden in the center, in which the Children's House stands by itself.

You enter the quadrangle by a great gateway. To the left is a room for storing baby carriages and bicycles. To the right is the porter's office, the post office and telephones for general use. Inside, nearest the gate, are two beds and an open space for the pleasure of every one. Beyond are the children's gardens, then a little low building called the Children's House, a charming place, white, with great windows that stand open to the

air, and covered with rambler roses. Here is the nursery school for children under seven. Another big room in the Children's House is the "after school," where the children over seven do their home lessons on returning from school, under supervision and in conditions that they could not possibly find in their own homes.

The "after school," the nursery school, and the cloak rooms occupy the whole front of the children's house. On the other side there is a large common room for the women fitted with electric sewing machines and electric irons, which can be used on payment of a small sum. Here also are great cutting tables and sewing tables, such as women know to be invaluable in sewing work, but which are impossible in small homes. A common wash house and laundry is in the basement of the building.

This central building also contains a surgery, where a doctor is in attendance at stated times and any tenant may have free advice. If tenants need attention at their own apartments, there is a fee of 20 cents. Twice a week the doctor examines all the school children.

The buildings are equipped with numerous bath rooms, but hot water is obtainable only at stated times.

The flats are of various sizes. Overcrowding is forbidden, and families must move into larger flats as their numbers increase. The largest flats are designed to accommodate the parents and five children. Tenants who raise above a certain standard in the care of their dwelling receive a percentage of their rent back in an annual bonus.

STUDY THE ADVERTISING PAGES.

The average reader does not pay very close attention to the advertising pages unless he happens to be particularly interested in some product or is in the market for equipment or material. He is missing a part of scientific literature which offers suggestions as practical as the reading pages. He is also losing an opportunity of studying a subject which bears the most important relationship to every business on earth. No matter what line of work you may be engaged in, a knowledge of publicity and salesmanship is valuable. Every form of occupation to be made successful depends upon a degree of salesmanship. Study the advertising pages. They represent an expenditure of time, thought and money, which makes them well worthy of your attention.—"Municipal Engineering."

Don't knock. Boost! Don't grouch. Smile! Don't mope. Advertise!

Even the best piece of machinery gets a hot bearing once in a while.—Ex.

Where the Newspaper "Counts" and Where it "Fails"

There are lines of business that are helped by newspaper advertising, but if you will take the trouble to look them up you will discover that they are lines in which the manufacturer is either dealing direct with the consumer or is selling something which is adaptable to general use.

Safety razors, dental creams, rubber heels belong in this category.

Everybody has use for them. The object of the advertising is confined largely to an effort to emphasize the advantages of certain makes over certain other competing makes. "Ad" men call that kind of advertising "building up a trade-mark" because its primary purpose is to fix a given make in the mind of the consumer to the exclusion of all other makes.

Building-trades advertising is quite a different story.

Here, you are selling something in which only a limited class may be said to have any interest.

If you could dig up a newspaper every copy of which found its way into the hands of an architect, or a builder, or a sub-contractor, or a building owner, it would pay you to hand up a rate of eighty cents an agate line for space.

But you can't.

When you buy space in the newspaper you pay for circulation probably ninety-eight per cent. of which represents, so far as you are concerned, dead waste.

In the building magazine this condition is diametrically reversed. As every copy goes to a reader directly interested in building, you are buying a circulation one hundred per cent. clear business prospects.

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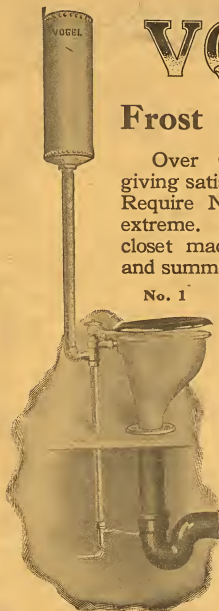
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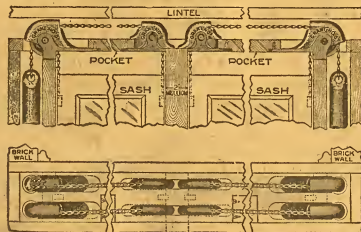
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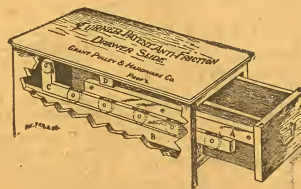
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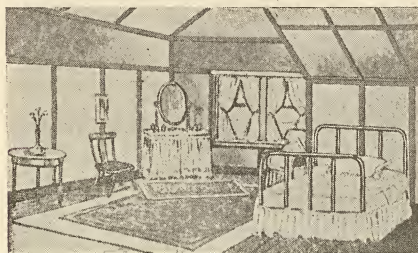
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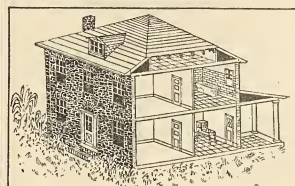


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January 9, 1918

BUILDERS' GUIDE

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As The Editor Sees It



WHEN the bill to license architects failed to get reported out of the hands of the committee, to which it had been referred, in the last session of the Pennsylvania Legislature there was some curiosity as to the cause for the antagonism to it shown by builders and building trades organizations.

Conspicuous in the forces opposing the passage of the bill was the Philadelphia Master Builders' Exchange.

A chapter in the annual report of the retiring President of the Exchange, Mr. Jacob L. Tyson, makes clear upon just what ground the Exchange based its opposition to the bill.

"An act was defeated in the State Legislature," states President Tyson's report, "the features of which were to require architects to be licensed, and to undergo an annual examination *which would also have required builders drawing their own plans to take out licenses.*"

In a conversation with a prominent member of the State Senate, representing the Western end of the State, the editor of THE GUIDE learns that the feeling was general among legislators that the provisions of the bill to license architects were unnecessarily drastic.

A bill embodying the more salient ideas of the defeated measure but made sufficiently clear as to the right of the builder to draw his own plans unmolested and a trifle less exacting in its demands upon the qualifications of the architectural graduate aspiring to practice, will, in the opinion of the Senator

with whom I discussed the question meet with little or no objection.

"Most of the members favored the idea of licensing architects and, in the main, the standards of qualification proposed. The objections were that the bill appeared to place more than the necessary number of obstacles in the way of the student battling his way to practice and that it was so loosely drawn as to admit of a reasonable doubt as to whether, under its provisions, a builder doing his own drafting was not bound by it."

Accurately speaking, the bill was not defeated, although the result was practically the same as if it had been. The bill was introduced, referred to committee and "died in committee." "Died in committee" means that a bill not reported back to the legislative body for action but has been ignored until adjournment established the official ending of the session.

If my memory serves me as it should, I was assured at the time by a number of prominent up-State architects interested in the passage of this licensing measure that there was nothing in any of its provisions that could be interpreted to interfere with the right of a builder to draw plans. The inhibition as to recall it was to the use of the word 'architect' by anyone other than a graduate of a recognized architectural school regularly qualified and licensed. I recall, in particular, a letter to this effect from Mr. Kast, of the Pennsylvania State Association of Architects and a com-

munication of like tenor from one of the officials of the Southern Pennsylvania Chapter.

* *

IS the "competition," as a means to determining the most competent man to design a given type of structure losing its vogue? And, if so,—why? Fairly conducted, the competition was a real help and stimulus to the young practitioner, the fellow not yet established, the "architect" who had still to "arrive." As a means of determining competency it was of doubtful utility. Just as the greatest satisfaction, in building, is to be had in awarding the work without competition to a builder of known reputation in his line so, in the matter of plans, is the best result to be had by selecting the right man for architect and leaving everything unreservedly in his care. The case for the educational advantages of a well-conducted competition is very fairly stated by the *Building Review* of New Orleans:

"The process of holding a competition in order to determine who shall be the architect of a building has not received very enthusiastic encouragement of late years. It is thought that competitions, unless they are very strictly conducted, do not produce the best results. The American Institute of Architects has studied this subject very carefully and has drawn up a definite set of regulations governing the conduct of competitions, which if they are followed in good faith, will give results which are entirely satis-

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factory both to promoter and competitor. The opinion has been growing, however, that a competition is seldom necessary, and that it is much better and far simpler to employ a capable architect outright and trust to his known skill and good judgment.

"However much may be said against competitions, we believe that they do good in advancing the standards of architectural design this much may certainly be affirmed in their favor. When competitions were in vogue the architectural magazines were much more interesting than they are to-day. The publication of the designs submitted by prominent and talented architects to which the presumption is they had given their best thought toward the working out of a plan for some important building or group of buildings, gave an opportunity to compare and contrast the respective merits of their solutions, and from an educational standpoint there is no more profitable exercise than this. Here was an opportunity for designers to work out new ideas and for students to learn, not only what their new ideas were, but also gain new points about rendering and presentation.

"The indifference that architects show toward competitions is based very largely on past experiences. Many of them have thrown away an appalling amount of time on competitions which were proven to be unfair and unjust and without intent on the part of their promoters. The intent of the rules drawn up by the A. I. A. is to give assurance that the real object of the competition is to select a design, and that the author of the design will be the architect selected to do the work. No promoter who is acting in good faith could have any objection to the Institute's regulations, since his own interests are entirely safeguarded, and the competitors on their part would also be satisfied to enter their services.

"We repeat that the educational advantages of competitions are very great. They help to advance the standards of design as a whole, they spur on the architect himself to greater efforts in his profession, they often bring to the front obscure men of genius, and last, but not least, they add immeasurably to the interest of the current architectural magazines."

* * *

JUST what is implied by that term so freely used these days: "non-essential business"? So many things that could have been rated non-essential a half-century back are necessities in the complex, elaborate scheme of modern life that there would be some difficulty, we imagine, about classing any one line as definitely dispensable. A few weeks back something was said in an of-

ficial way about the non-essential character of tile work. The point-of-view was that tile is to be regarded as a luxury, pretty and comforting, and grateful to the eye, and all that, but not necessary to home building at a time when the transportation facilities of the country are needed for the more vital commodities. This question of the non-essential is one big with possibilities for mischief. Discussing it in connection with the housing problem *Realty* remarks, in a recent issue:

"Business men everywhere are wondering what is non-essential business. They are anxious to be informed as to the manner in which this will be determined by the government and what course will be followed in withdrawing labor and materials from such industries as may be regarded as non-essential during the war for the necessities of industries essential to the war. No policy in this connection has been announced by the government.

"Before a business is classified as non-essential and deprived by act of government of labor and material, the industry through duly elected representatives should be given an opportunity to discuss the matter; to learn the premises of the government and the reasons for action.

* * *

IT should be a cardinal principle that the normal structure of business should be maintained during these abnormal times as far as possible. Therefore, consideration should be given to the possibilities of allowing non-essential business a proportion of its requirements of labor and materials, so that some organizations may be retained to be developed again upon the return of peaceful conditions.

"Furthermore, when the government is forced to deprive a business of materials and labor because it is non-essential, an effort should be made by the government to place with the industry orders for products needed in the war. In this manner a helping hand may be given to business suffering solely through sacrifice for the common good.

"In this same connection, it may be said that if men are to be withdrawn from industrial communities where they have houses and gathered in manufacturing centers already congested, there is created a great housing problem in connection with the production of war supplies. But if in placing the war orders effort is made to produce war supplies in the centers where labor is housed not only will congestion in munition centers be relieved, but there will be avoided at the end of the war the great problem of moving labor back to the normal producing centers.

ONE of the reasons for suggesting the formation of War Service Committees in industries was to bring about an early consideration of the installation of heating devices, making sure that protection is afforded where pipes run through walls or along unfinished ceilings.

"The carelessness of smokers is proverbial. Many fires originate from discarded cigarette and cigar ends, thrown carelessly into light shafts or in corners of the basement. Smoking in bed has caused much loss.

"The home owner will undoubtedly profit by giving careful consideration to the ordinary fire hazards and inspecting his home in a critical manner to discover and remedy those which exist. In every home one or more portable fire extinguishers should be kept. These, usually of the hand type, may be purchased for a few dollars at the nearest hardware store and are infallible in case of incipient flames. Better than protection, however, is prevention and the application of common-sense methods together with a realization of the seriousness of the potential loss threatened by fire in the home will result in a vast saving for the home-owning interests of America."

* * *

A NEW YORK building concern, which, in common with other concerns in the trade, has felt the pinch of the war depression that has settled down upon the building field, set out some six months ago to interest property owners in remodeling along modern and improved lines. Selecting certain decidedly ram-shackle, dilapidated and unproductive buildings on lower Sixth avenue as object lessons their concern persuaded the owners to contract for such alterations as would make the buildings over into desirable and rentable properties. The medium used in each case was architectural terra cotta. The alterations embodied up-to-date ideas in stone construction. Interior changes followed after such important items as heating, ventilating, natural and artificial lighting, and the installation of ironing machines. The properties altered rented before they were completed at figures netting a very good return on the investment. Other owners became interested and new contracts were made. The firm now has enough work ahead of it to keep it going for the next half-year. There is no trouble about the deliveries of terra cotta. It has remained nearly stable as to price. Philadelphia has a vast amount of real estate that is unproductive for the same reason as that noted in the case of these Sixth avenue properties. Just at this time when building activity is practically at a standstill would be the best possible time to undertake the remodeling and renovating of

such realty. The cost of converting the Sixth avenue buildings from unrentable and unsalable eyesores into attractive, readily rentable and highly desirable stores averaged something like \$3,000 per building. Many of those remodelled are netting a return of ten per cent. on the investment. Isn't there the germ here of an idea that should spell opportunity for some live-wire local building firm?

* * *

WHAT causes fires?

Carelessness, of course. The primary cause of probably seventy per cent. of all fires is to be found in the carelessness with which waste material of an inflammable sort is permitted to collect and accumulate. Some time ago we had a talk with an inspector whose business requires him to visit the cellars of large mercantile establishments. If what he has to say about conditions are true, and we have no reason to question his assertions, there is a special providence looking after a considerable number of fire-risks. Empty packing crates, excelsior and paper piled ceiling high were common occurrences. In twenty-seven out of a total of thirty cellars visited by him in one day recently a lighted match or a cigarette butt would have been sufficient to start a costly conflagration. An insurance expert has compiled a list of the more prolific causes of fires in the home, fires of the kind that may be avoided by the exercise of ordinary care and foresight. Here is the list:

- Defective flues.
- Chimney sparks.
- Defective insulation of electric wires.
- Poorly constructed open fire-places.
- Improper ash disposal.
- Carelessness with lamps.
- Carelessness with matches.
- Spontaneous combustion.
- Improperly installed heating devices.
- Waste and rubbish fires.
- Dangerous bonfires.
- Grass and brush fires.
- Carelessness with electrical apparatus.
- Dangerously placed gas jets.
- Christmas tree and ornament fires.
- Gasoline, naphtha and gas explosions.
- Careless use of basement lights.
- Overheating of stoves.
- Smokers' carelessness.
- Sparks from nearby fires.

* * *

WRITING in *Realty* on this subject an insurance man says:

"The first natural thought in regard to a fire loss concerns insurance; and if the destroyed property has been covered by insurance to the extent or the loss, those of us to whom the loss has not struck directly home little realize its far-reaching effect. In other words, unless the lesson has at some time been

burned in, we do not appreciate the results of the indirect loss.

"Naturally, when lives are lost or bodies burned and crippled we sense the significance of one factor in the indirect loss, but apparently experience only will teach the entire lesson. A fire in the home disrupts every-day life; causes the loss of articles of an unreplaceable nature, dear to us through association or as family heirlooms; objects of art and vertu which cannot ever be replaced; documents and other valuables. Pathetic indeed is the thought of attempting to re-establish one home which has been perhaps the culmination of a life-long ambition.

"When we realize that fully seventy per cent. of home fires are the result of carelessness, improper construction, improper installation of heating devices, and in many cases directly caused by ignorance which allows the existence of dangerous conditions, we know that now is the time for the home-owner to look to his own house, to go over it carefully and eliminate the many ordinary fire-hazards which we overlook because of familiarity.

* * *

POORLY constructed open fire-places and gas grates are dangerous. Open fires should not be left unattended, nor should they be built close to the front of the fire-place. Fire-place screens should be used constantly in order to avoid the danger of burning embers thrown out by log fires. Flues should be ample and metal flues from gas grates should be avoided.

"Defective insulation constitutes an-

other prolific cause of fires in the home. In case where electric equipment is poorly insulated, dangerous short-circuits may result. The home-owner is protected in many communities by systematic inspection on the part of building departments and insurance organizations, but he will do well, particularly in isolated communities to have his equipment gone over occasionally by a good electrician. Another hazard which should not be overlooked is that of the mishandling of electrical apparatus such as electric irons, heating and cooking devices. Many fires are caused through leaving the current turned on in the electric flat-iron, causing it to overheat and set fire to the paper or cloth on which it may be resting.

"Accumulations of waste paper and rubbish are dangerous potential hazards. Metal or metal covered containers can easily be purchased or made at home and in these waste matter should be placed. In piles of oily rags and various waste materials spontaneous combustion (a chemical reaction causing heat sufficient to start a fire) may start at any time. Waste accumulations are both unsanitary and dangerous."

* * *

THIS fire question is one of the biggest economic wastes with which the United States has to deal. We lose annually, in preventable fires, more money than all Europe.

Why?

Carelessness for one thing.

Lax methods of inspection for another.

But, first, and chiefly, the national belief in sin-carelessness.

EDITORIAL NOTES

Josiah A. McKee, vice-president and treasurer of Merchant & Evans Co., died at his home in Philadelphia, December 18th, after a brief illness, aged 73 years. He was born in Columbus, Ga., but moved at an early age to Philadelphia, where he was long identified with the banking business, having been cashier of the Tradesmen's National Bank for many years prior to becoming treasurer of Merchant & Evans Co., in 1896.

Mr. McKee was well known to the metal trade throughout the United States, and was foremost in every movement having for its object the betterment of trade conditions and the creating of a higher standard of business methods. For several years he was chairman of the Metal Branch of the National Hardware Association of the United States, and was also at one time president of the Philadelphia Branch of the National Association of Credit Men. At the time of his death Mr. McKee was also secretary and treasurer of the Globe Automatic Sprinkler Company, vice-

president and treasurer of the Schuylkill Railway Company, director of the People's National Fire Insurance Company.

He served in the highest sense both the public and private good of all with whom he came in contact. His death is deeply regretted and his memory will long be cherished. Mrs. McKee survives him, with two sons and a daughter.

* * *

National Association of Sand and Gravel Producers will hold its annual convention in Chicago, Ill., February 7 to 8, 1918. Headquarters will be at the Great Northern Hotel. An interesting program has been prepared and open discussions will be conducted upon a number of live topics.

* * *

The Parsons Construction Co., architects and engineers, Security Mutual Building, Binghamton, N. Y., has prepared plans and specifications for a four-story, brick and reinforced concrete hotel to be erected in Elmira, N. Y.,

on a site to be announced later. This project is to be owned and operated by a company now being formed. Charles Stewart, attorney, Security Mutual Building, Binghamton, is acting for the interested parties. This hotel will contain approximately two hundred rooms in addition to a large dining room, grill, ballroom, cafe, and other modern hotel features. The estimated cost is in the neighborhood of half a million dollars. According to the present plans active construction will not be started before next spring.

Parker Supply Co., manufacturers of the Parker line of steel sheet metal screws, expansion bolts, sash chains and damper quadrants, has been completely reorganized and is now backed by a \$3,000,000 international concern. Much new machinery has been installed in its plant at 785 East 135th street, doubling the company's output. H. Rosenberg, well known as an inventor, remains as president of the company.

Plans and specifications are being prepared in the offices of William Neumann, architect, 314 Palisade avenue, Jersey City, N. J., for a modern clubhouse to be erected on the Boulevard in that city, near the Tube station. The building will be for the B. P. O. E., No. 211, of Jersey City, Patrick Powers, chairman of the building committee. The building will be constructed of brick and stone and will be fireproof. The plans call for a structure four stories in height, with ground dimensions of approximately 60x100 feet, to contain a grill room, bowling alleys, billiard room, lodge rooms, and a limited number of bedrooms. The cost is placed at \$100,000. Estimates will shortly be called for construction under a general contract.

S. Frank Butler, district engineer of the Portland Cement Association at New York, recently resigned to become district contract manager of the Turner Construction Co., of New York. He will be in charge of the New England district, with headquarters in Boston. Mr. Butler was graduated from Swarthmore College in 1908 and was in general construction work before going to the Portland Cement Association four years ago. He was district engineer in New York for a year and a half.

Tentative plans have been started for rebuilding the Lakewood Club, on Main street, Lakewood, N. J., recently destroyed by fire. Up to the present time no definite arrangements for this project have been consummated and no architect has been decided upon. The work of reconstruction will be under the direction of a building committee to be formed. Col. Charles N. Lindley, 115 Broadway, Manhattan, is the secretary of the organization.

Pennsylvania and Atlantic Seaboard Hardware Association and the New York State Retail Hardware Association will hold a joint annual convention and exhibition in New

York City, February 12, 13, 14, 15, 1918. Headquarters at the Hotel Astor.

The preliminary plans and specifications are being prepared for the erection of a million dollar apartment project in Buffalo, N. Y. James Walker, 77 Builders' Exchange, Buffalo, is the architect for this operation, which will be six stories in height, fireproof throughout and with dimensions of approximately 250x150 feet. Construction will probably not be started for some time.

American Society of Civil Engineers will hold its 65th annual meeting in the new headquarters of the organization, 33 West Thirty-ninth street, New York, Wednesday and Thursday, January 16-17, 1918. The business session will take place Wednesday evening.

B. F. Affleck, Chicago, was re-elected president of the Portland Cement Association at its recent annual meeting in New York. Mr. Affleck is president of the Universal Portland Cement Co. F. W. Kelley, president of the Helderberg Cement Co., Albany, N. Y., was elected first vice-president, and Richard Hardy, president of the Dixie Portland Cement Co., Chattanooga, second vice-president. G. S. Brown, president of the Alpha Portland Cement Co., Easton, Pa., was elected treasurer.

Chicago Cement Machinery and Building Material Show will be held in the Coliseum, Chicago, February 6-13. The show will be held under the auspices of the National Exhibition Co., 123 Madison street, Chicago.

Spencer Turbine Cleaner Co., Hartford, Conn., has received the order for the vacuum cleaner installation in the Hotel Commonwealth, New York, which is to be one of the largest hotels in the world. The system will consist of a central plant in the basement, with piping extensions to several hundred stations.

American Road Builders' Association will hold its fifteenth annual convention in St. Louis, Mo., during the early part of February, 1918. Further details of this meeting will be available for a later issue.

A. E. Hansen and W. S. Coulter have terminated their partnership, except for the conclusion of certain engineering works. Mr. Hansen will continue in the practice of hydraulic and sanitary engineering at the office heretofore occupied by Hansen & Coulter, at 2 Rector street, New York City.

Master House Painters and Decorators' Association of the State of New York will hold its annual convention at Syracuse, N. Y., January 22 to 24, 1918. Headquarters will be at the Onondaga Hotel.

Royal A. Meeker, of Plainfield, N. J., has

resigned as highway engineer of the State of New Jersey. William G. Thompson, who was associated with Major-General George W. Goethals in the building of the Panama Canal, has been named by the latter to succeed Mr. Meeker.

American Society of Heating and Ventilating Engineers will hold its annual meeting at the Engineering Societies Building, 29 West Thirty-ninth street, New York City, January 22 to 24, 1918.

Davis H. Tuck, until recently assistant physician for the United States Public Health Service, has resigned to accept the position of commercial engineer for industrial and street lighting with the Holophane Glass Company, New York City.

American Concrete Institute will hold its annual meeting in Chicago, Ill., February 7 to 9, 1918. Secretary, H. B. Alvord, 27 School street, Boston, Mass.

N. B. Payne has opened an office in the Havemeyer Building, 25 Church street, New York, as an electric crane specialist. He was formerly associated with Manning, Maxwell & Moore, Inc.

American Institute of Consulting Engineers will hold its annual meeting in New York January 14, 1918. Secretary, F. A. Molitor, 35 Nassau street.

C. G. Young is now connected with Ford, Bacon & Davis, engineers, 115 Broadway, New York City, and has discontinued his offices at 14 Wall street, New York.

Shattuck & Hussey, architects, 19 La Salle street, Chicago, Ill., are preparing the preliminary plans for a new Young Men's Christian Association building to be erected in Bayonne, N. J., on a site to be selected. This structure will be constructed of brick and stone, semi-fireproof and will be three stories in height. The ground dimensions will be approximately 200x94 feet. The cost is estimated to be in the neighborhood of \$250,000.

The building materials markets in general have been practically inactive and one of the branches report business of unusual character. Sales have been light during the week and inquiries for future requirements have fallen off. Among both the general contractors and the material and supply interests there is a feeling that for the balance of the winter season the activity in the building line will be negligible, but there is also a growing attitude of hope in the prospects for the coming spring. Predictions are being made that next spring should witness a marked improvement in the building situation throughout the entire country, and that the contractors, material producers and dealers will have all of the business that they are capable of handling with efficiency and despatch.

* * *

Much of the anticipated improvement in the building situation is contingent upon the war. As long as the military conditions are favorable to the Allies the future of the building industry is safe, whereas if the allied forces should suffer severe reverses in any form there would be a greater tendency to discourage new structural projects. Naturally we are not looking for anything of this sort, and at the present time all of the exertions of the building industry are being devoted toward the goal of a greatly increased volume of business for the coming year, predicated upon the success of our military forces and those armies allied with us in this great war for "World Democracy."

* * *

In the majority of material lines the prices are fairly stabilized. Many of these prices were fixed by the Federal authorities and others have been established to conform with the control prices. With stabilized markets for materials and supplies prospective builders are able to mature their plans with greater assurance that they will emerge from their projects with profit. This feeling will do much to advance the cause of building, and if some of the deterrent factors are eliminated so that progress is possible there is no reason why the building industry should not experience one of the best years in its history in 1918.

* * *

At the present time the country is under-built and it will require a considerable volume of new construction to bring the housing facilities, both for living purposes and industrial and commercial use, up to the actual necessities. For this reason alone it has been predicted that the coming year, all other things being equal, will witness a marked improvement in the building situation, with contractors fully engaged upon lucrative projects, and manufacturers and dealers in materials and supplies doing a capacity business.

* * *

The architects' registration law has been passed by the Wisconsin Legislature, providing that after January 1, 1918, no person doing business in Wisconsin shall make use of the title architect, or so represent himself without a certificate of registration. A board of five examiners will have full power to prescribe rules and regulations for the examination and registering of architects. Candidates will be required to submit satisfactory evidence as to their thorough knowledge of building construction, building hygiene, architectural history and mathematics. Five years' experience is also required. In lieu of examination, the board may accept a diploma of graduation from a recognized architectural school supplemented by at least three years' experience. Examination may also be waived in cases where an architect is registered in another State or country having satisfactory standards. Any person already engaged in the practice of architecture at the time of the passage of this bill may receive a certificate without examination.

The Hedden, Pearson, Starrett Corporation has been incorporated under the laws of the State of Delaware for the purpose of acting as consulting engineers, contractors for engineering work, contractors for operation, purchasing agents and representatives of foreign corporations in the following industries: Steam and electric railways, tramways, highways, bridges, canals, hydro-electric power plants, steam power plants, submarine dredging and rock work, shipbuilding, mining, docks and waterfront improvements, building construction, chemical works, electrical equipments, water works, street lighting, telephone systems, etc.

Mr. William H. Burr, D. Sc., is the director and has been tendered the presidency of the company. The vice-presidents are: Mr. Louis O. Hedden, Mr. Ward E. Pearson, Mr. Theodore Starrett, Mr. Edward H. Beckert, and Mr. John V. Clermont. Mr. Harry J. Kane is the treasurer, and Mr. V. A. Van Valkenburg, secretary.

REAL GOLD UNMINED.

"I am here as the self-appointed representative of 900 trade and technical publications printed in the United States and circulated wherever the English language is spoken. How important they are in their relation to advertising may be understood when I tell you that they carry, in the aggregate, advertising to the amount of at least \$25,000,000 a year—one-eighth of all the advertising money that is spent for all forms of publicity in the country—and that these advertisers "stick" year after year because it pays them to stick.

I have bought, sold and written all kinds of advertising—pasted and printed, indoor and outdoor, consumer and dealer, technical and commercial—and I have reached the conclusion that there is more real gold as yet unmined in the trade press field than in any other field of advertising endeavor."—Extract from address by R. R. Shuman, before the annual convention of the Associated Advertising Clubs at Omaha.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is commensally largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED; ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Store Building (alts. and extension), 132-34 Arch street. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, H. Fliegelman, 35 N. Second street, Philadelphia. Consists of general interior alterations and rear extension, brick, 4 stories, 30x60 feet. Architect taking bids, due January 9th, at 10 A. M. B. Bornstein, 1510 North Franklin st.; Raith Const. Co., 304 W. Master street; Jos. Levin, 1530 South Sixth street; Samuel Schultz, 3030 North Sixth street; P. B. Davis, 240 North Sixteenth street; Lam Building Co., 1001 Wood street, are figuring.

Residence, Harrison and Oakland streets, Philadelphia, \$3,000. Architect, private plans. Owner, Geo. Edel, 3827 Frankford avenue, Philadelphia. Brick, 3 stories, 15x31 feet, slag and tin roof, hot water heating, combination lighting, hardwood floors, stone foundations. Owner will build.

Warehouse (add.), American and Columbia avenue. Architects, Hencock & Hokanson, 1218 Chestnut street, Philadelphia. Owners, Geo. C. J. Fleck and heirs of J. Henry Fleck, care of architects. Reinforced concrete and brick, 4 stories and basement, 52x64 feet, asphalt roof, maple and cement floors, hollow metal sash, Almetal fire doors, hollow metal doors, stone foundations, ornamental iron work (heating and lighting reserved). Architects taking bids, due January 14th, at 3 P. M. Cramp & Co., Denckla Building; Franklin Const. Co., Bulletin Building; Robt. E. Lamb Co., 343 N. Nineteenth street; P. B. Davis, 240 N. Sixteenth street; H. E. Batton, 1713 Sanson street; A. R. Raff Const. Co., 1035 Thompson street, and Barclay White & Co., 1713 Sanson street, are figuring.

Residences (40), Tinicum avenue and Alburger lane, Island road, Philadelphia. Architect, private plans. Owners, The Joseph Levin Co., 1530 South Sixth street, Philadelphia. Brick, 2 stories, 18x32 feet, slag roof, hot air heating, combination lighting, pine floors. Plans in progress. Will take sub-bids in about two weeks.

Temporary Building, Front street and Boulevard, Philadelphia. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, St. Gabriel's P. E. Church, care of Rev. J. LeRoy, 8020 St. Martins lane, Chestnut Hill, Philadelphia. Frame and compoboard, 1 story, 33x66 feet, shingle roof, pine floors. Architect has received bids.

Apartment House (alts.), Nineteenth and Venango streets, Philadelphia. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owners, Lester Building and Loan Association, care of architects. Consists of general interior alterations, hardwood floors, tile work, marble work, electric lighting, heating extension, etc. Architects taking bids, due as soon as possible. Hogg Const. Co., 1634 Sanson street, and Specht & Sperry, Heed Building, are figuring.

Pier No. 78, South Wharves, Philadelphia (completion), Architect, private plans. Own-

ers, City of Philadelphia, Department of Wharves, Docks and Ferries, George S. Webster, Director, Bourse Building, Philadelphia. Consists of interior finishing, concrete floors, elevator and general equipment, electric lighting. Owners have received bids.

Residences (3 prs.), Wayne avenue and Upal street, Germantown. Architect, Stanley K. Neubauer, 1118 Chestnut street, Philadelphia. Owner, Horace K. Read, 3354 North Park avenue, Philadelphia. Brick, 3 stories. Architect taking bids, due January 11th. Wm. J. Gruhler Co., 219 East High street, Germantown, is figuring.

Store (alts.), Eighth and Reed streets, Philadelphia. Architect's name withheld. Owner's name withheld. Consists of interior alterations, millwork. Architect taking bids, due as soon as possible. Hogg Const. Co., 1634 Sanson street, is figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Theatre, Broad and Lombard streets, Philadelphia. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, The Dunbar Amusement Corporation, care of architects. Brick, stone and reinforced concrete, 1 story, basement and gallery, 78x129 feet, slag roof, steam heating, electric lighting, tile, marble and terrazzo work, pine and cement floors, metal lath, fire escapes, ornamental iron work, automatic sprinklers. Contract awarded to Alex. Chamblay, Twenty-first and Summer streets, Philadelphia.

Garage (int. alts.), Twenty-third and Walnut streets, Philadelphia, \$2,000. Architect, Philip S. Tyre, 1509 Arch street, Philadelphia. Owners, Philadelphia Auto Trade Assn., Broad and Callowhill streets. Mill work. Contract awarded to J. Sims Wilson & Co., 1125 Brown street, Philadelphia.

Residences (3), Smick and Leverington sts., \$6,000. Architect, private plans. Owner, Martin H. Keller, 326 Dupont street, Philadelphia. Brick and stone, 2 stories, 14x30 feet, slag roof, hot air heating, hardwood floors. Contract awarded to Wm. E. Keller, Green lane and Mitchell streets, Philadelphia.

Residences (2) Humon and Ridge avenue, Philadelphia, \$7,000. Architect, private plans. Owners, Keller Bros., Green Lane and Mitchell street, Philadelphia. Brick and frame, 2 and 3 stories, 16x21 feet, slate roof, hot water heating, combination lighting, hardwood floors. Contract awarded to Wm. E. Keller, Green Lane and Mitchell street.

Coal Trestle and Office, Second and Reimel streets, Philadelphia. Architect, private plans. Owners, Moyer Coal Co., care of build-

er. Brick, concrete and wood, 1 story, 16x24 feet, slag roof, electric lighting, pine floors. Contract awarded to Keo. Kessler Const. Co., Drexel Building, Philadelphia.

Residence and Garage (alt. and add.), 538 East Leverington avenue, \$4,500. Architect, private plans. Owner, Edw. S. Stafford, 4326 Manayunk ave., Roxborough. Stone, 1 story, 15x10 feet and 22x24 feet, tin roof, hot water heating, combination lighting, tile and marble work, hardwood floors, metal lath. Contract awarded to Wm. H. Eddleman & Son, 453 Green Lane, Roxborough, Pa.

A certain wallboard man advertised in the Guide for awhile and then dropped out. We've had a dozen inquiries since then, asking for his address—every inquiry from a cash buyer. This is a common occurrence. It's hard to make some advertisers see the vital importance of a standing "ad."

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

"TRIDENTS" FOR
WATER, OIL,
GASOLINE, BRINE,
ETC., ETC.

"TRIDENT" METERS

MORE TRIDENTS
IN PHILA. THAN
ANY OTHER
MAKE

PHILADELPHIA METER CO., 942 Real Estate Trust Building.

BOTH PHONES

CLEAR THE WAY

Help Our Army, Navy and Allies to Win this War



AMERICA'S RAILROADS are doing wonderful work, but they need help.

Freight cars must be unloaded and terminals cleared.

If it is your job, speed up loading and unloading of cars on private sidings.

Do not be a slacker by trying to save expense of labor or space by using freight cars as storage houses.

If your merchandise is congested at the terminals and you have not sufficient teams or motor trucks to move the goods at once, buy them or hire public ones.

If you can't do this, do something else—ask your neighbor to help you. Why hesitate to hire your neighbor's trucking facilities?

We must pull together.

OFFICERS
EXECUTIVES
MANAGERS

Shipping Departments throughout the country demand the personal consideration of executives.

Co-operation throughout the entire establishment with the Shipping Department is vital.

Ascertain all the old rules and regulations your Shipping Department is expected to carry out, and if they do not fit the present emergency, throw them away.

Plan to reach nearby points by motor trucks, teams or waterways—save the railroad terminals. Twenty-five per cent. (25%) of case, barrel and package merchandise can be delivered in this way, and help break the congestion. No one wants embargoes.

EXCLUSIVE
GOVERNMENT
TERMINALS

If the railroads decide to reserve certain terminals exclusively for Government materials, do not grumble, but go the extra distance and haul your goods to or from other terminals.

It may be necessary to have a National Terminal Clearing Day in order to clear all terminals throughout the entire country.

NATIONAL
TERMINAL
CLEARING
DAY

If we have a Terminal Clearing Day, keep your teams and motortrucks going and keep your receiving departments open continuously 24 or 48 hours, if need be, and give the railroads a chance to catch up.

Let everybody be prepared some way, somehow, to move their merchandise away from the terminals immediately.

This Appeal Contributed by The Autocar Company, Ardmore, Pa., Manufacturers of "The Autocar Motor Truck"

WARNING TO GAS CONSUMERS

Gas consumers are warned that we may be unable, temporarily, fully to meet the great increase in the demand for gas, due to cold weather and the shortage of the domestic coal supply.

There is danger of some burners going out when the gas demand is heaviest, and gas coming on again later.

Be sure that all burners not in use, ARE SHUT OFF.

Do not go to sleep with any gas burning.

If any burner will not light, be sure to close the gas cock before you leave it.

Do not keep a burner lighted unless some one is in the room.

If you smell gas, examine and shut off all burner cocks. Do not under any circumstances search for a gas leak with a candle or match.

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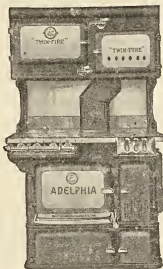
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PENNSYLVANIA Construction News

Residence (alts.), Frazer, Pa. Architects, Duhring, Okie & Ziegler, 1218 Chestnut st., Philadelphia. Owner, Thos. L. Fansler, Bullitt Building, Philadelphia. Stone, 2½ stories, shingle roof, plumbing, electric lighting and general alterations. Architects taking bids, due January 12th, at 9 A. M. Wm. H. Parلمان, Devon, Pa.; Frank H. Shainline, Devon, Pa.; J. P. Lamborn, Berwyn, Pa.; and Plummer E. Jefferies, West Chester, Pa., are figuring.

Residence, Pottsville, Pa., \$10,000. Architect, Benj. R. Stevens, 1737 Filbert street, Philadelphia. Owner, C. H. Whitehouse, Pottsville, Pa. Hollow tile and stucco, 3 stories, 42x46 feet, shingle roof (hot water heating and plumbing reserved), electric lighting, hardwood and yellow pine floors, tile and marble work. Architect taking bids, due January 19th. Walter Fertley Sons, Gordon Nagle, and C. C. Messersmith, all of Pottsville, Pa., are figuring.

Moving Picture Theatre (alt. and add.), South Bethlehem, Pa. Architect, Benj. R. Stevens, 1737 Filbert street, Philadelphia. Owner, Chas. F. Oldt, Easton, Pa. Brick, 1 story and balcony, 40x220 feet, tin roof, maple floors (steam heating and plumbing reserved), electric lighting, mill work, fire doors. Plans in progress. Architect will take bids in a week.

Store and Apartment, Tamaqua, Pa. Architect, Benj. R. Stevens, 1737 Filbert street, Philadelphia. Owner, Harry Gardner, Tamaqua, Pa. Brick, frame and stucco, 4 stories, 150x28 feet, slag and tin roof, composition and hardwood floors, steam heating, electric lighting, roof ventilators. Architect taking bids, due as soon as possible. A. L. Graff, Tamaqua, Pa.; and Andrew Bruslin, Summit Hill, Pa., are figuring.

Cottages (2), Laurelton, Union County, Pa. Architect, Geo. E. Idell, 34 South Sixteenth street, Philadelphia. Owner, Penna. Village for Feeble-minded Women, care of State of Pennsylvania, care of Miss Nora P. Brown, president, Lancaster, Pa. Stone, fireproof, 2 stories, 84x100 feet and 53x77 feet, slag and slate roofs. Plans completed. Owners will advertise for bids, due February 1, 1918.

Stock Pens and Foreman's Office, Herr's Island, Pittsburgh, Pa. Architects, M. & W. Western Division, Pittsburgh, Pa. Owners, Penna. RR., care of F. W. Smith, Jr., acting superintendent, Conemaugh Division, 1003 Penn avenue, Pittsburgh, Pa. Brick, reinforced concrete, 2 stories and 1 story, 382x175 feet, 236x195 feet and 17x10 feet, asbestos roof, pine and cement floors, electric lighting, rolled steel sash, hollow metal skylights, fire doors, iron stairs, ornamental iron work, hollow tile, metal lath, roof ventilators (heat-

ing and cement work reserved). Owners taking bids, due January 25th. Irwin & Leighton, 126 North Twelfth street, Philadelphia, are figuring.

Club House (alts. and add.), Orville, Pa. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owners, Waist, Silk Suit & Children's Dressmakers Union, 40 N. Ninth street, Philadelphia. Brick and stucco, 3 stories, 45x80 feet, slag roof, hot water heating, general interior alterations, plumbing. Architects taking bids, due January 14th. Wm. B. Mitchell, Lansdale, Pa.; Wm. B. Hedrick, Hatfield, Pa.; Ludwig Kaelin, Lansdale, Pa.; Specht & Sperry, Heed Building, and Max J. Benamy, 3042 W. York street, are figuring.

Stores and Apartments (alt. and add.), Marcus Hook, Pa. Architect, E. Canby May, Dupont Building, Wilmington, Del. Owner, Mrs. Rose Gross, Marcus Hook, Pa. Brick, 2 stories, 64x40 feet, slag roof, steam heating, pine floors, electric lighting, bulk fronts. Plans in progress. Owner will take bids in about two weeks.

Power Plant and Equipment, Clifton Heights, Pa. Architect, private plans. Consulting engineer, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, The Kent Mfg. Co., Clifton Heights, Pa. Consists of brick and cement work and necessary changes necessary for installation of power equipment. Plans in progress.

Residence (into store) (alts.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, The Seyfert Institute, 419 S. Fifteenth street, Philadelphia. Stone, 2 stories, general interior alterations, steam heating, elec-

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trick lighting. Plans in progress.

Residence (alts. into store), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, The Seyfert Institute, 419 South Fifteenth street, Philadelphia. Stone, 2 stories, general interior alterations, steam heating, electric lighting. Architect has received bids.

Chief Gunners' Quarters, No. 2732, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, care of A. L. Parson, Acting Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Brick and frame, 2 stories, 36x30 feet, asbestos shingle roof, hot water heating, electric lighting, tile work, maple floors, hollow tile, metal lath, waterproofing. Owners taking bids, due Jan-

uary 14th. Wark-Yardley, 1737 Filbert street; Evans Const. Co., 9 South Eighteenth street; Monaghan & Losse, Inc., 3016 Chestnut street, Philadelphia, and Dawson Const. Co., May Building, Pittsburgh, Pa., are figuring.

Annex, Norristown, Pa., \$28,000. Architect not selected. Owners, Board of Trustees, State Hospital for Insane, Norristown. Competitive plans will be received until January 29th at noon. For details apply to Oscar L. Schwartz, steward, State Hospital, Norristown, Pa.

Post Office (remodeling), Pittsburgh, Pa. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Consists of general interior and exterior alterations and addition. Owners will advertise for bids in a few days.

PENNSYLVANIA Contracts Awarded

Passenger Station (alt. and add.), Conshohocken, Pa., \$10,000. Architect, Samuel T. Wagner, Twelfth and Market streets, Philadelphia. Owners, Philadelphia & Reading R.R. Co., Twelfth and Market streets, Philadelphia. Consists of general fire repairs, frame, 1 story, 35x55 feet, slate roof, pine and maple floors, electric lighting (heating reserved). Contract awarded to F. W. Van Loon, Denekin Building, Philadelphia.

Engine House (extension), Bridgeport, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Brick and concrete, 1 story, 90x112 feet, slag roof, concrete floors, rolled steel sash, roof ventilators, wire work, ornamental

iron work. Contract awarded to Robert E. Lamb Co., 843 North Nineteenth street, Philadelphia.

Arched Bridge (repairs), south of Mingo, Pa. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete, steel and timber, 115 feet. Contract awarded to Seeds & Durham, Park Lane and Horter street.

Bridge No. 50 (rebuilding), on S. S. & L. Branch, south of Blue Hill. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Steel and concrete work, waterproofing. Contract awarded to Wm. E. Riebe, Tamaqua, Pa.

Miscellaneous Construction News

Residence (add.), Marshallton, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, M. Henderer, Wilming-

ton, Del. Frame, 2 stories, 4 room addition, shingle roof, pine floors. Plans completed. Architect about ready for bids.

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Factory, Vandevere avenue and Jessup st., Wilmington, Del. Architect, Leon W. Crawford, Wilmington, Del. Owners, Diamond Ice & Coal Co., Wilmington, Del. Brick, 1 story, 100x250 feet, composition roof, concrete floors, electric lighting. Owners are taking sub-bids.

Residence (alt. and add.), Wilmington, Del. Architect, Leon W. Crawford, Wilmington, Del. Owner, Townsend W. Miller, Wilmington, Del. Brick and stucco, 2½ stories, 6 rooms, shingle roof, hardwood floors, electric lighting, tile and marble work. Contract awarded to H. D. Haddock & Co., Wilmington, Del.

Laundry Building, Pierce street, west of North Capitol street, Washington, D. C. Architect, Wm. Lowenthal, 1205 Chestnut street, Philadelphia. Owners, National Laundry Co., on premises. Brick, 2 stories and basement, 60x72 feet, concrete foundations, slag roof, cement and plank floors, gas lighting, reinforced concrete work. Owners are ready for bids.

Proposals

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 2, 1918.—Sealed proposals will be opened in

office at 3 p. m., February 6, 1918, for the extension, remodeling, etc., of the United States post office (old) at Pittsburgh, Pa. Drawings and specifications may be obtained from the custodian at Pittsburgh, Pa., or at this office, in the discretion of the Supervising Architect.

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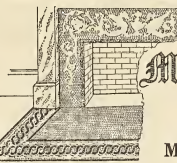
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NEW JERSEY Construction News

School, Cambridge, Burlington County, N. J. Architect, A. W. Kleeman, First National Bank Building, Trenton, N. J. Owners, School Board of Burlington County, Cambridge, N. J. Frame, 1 story and basement, 68x92 feet, slate and slag roof, cement and maple floors (steam heating, electric lighting and plumbing reserved). Revised plans completed. Owners, care of Mr. Bright, Riverside, Burlington County, N. J., will advertise or bids in a few days.

Residence (alt. and add.), West State st., Trenton, N. J. Architects, Fowler & Seamon, Broad Street Band Building, Trenton, N. J. Owner, J. Ferdinand Convery, on premises. Brick, 3 stories, 22x75 feet, mill work, oak floors, painting, electric lighting, tile work. Architects taking sub-bids.

Chapel (alt. and add.), Trenton, N. J. Architects, Fowler Seamon, Broad Street Bank Building, Trenton, N. J. Owners, St. Michael's Church, Trenton, N. J. Brick, 1 story, general interior alterations, tile floors, electric fixtures, tile work. Architects taking sub-bids.

Car Barn (fire repairs), Trenton, N. J. Architect, private plans. Owners, Trenton & Mercer County Traction Corporation, American Mechanics Building, Trenton, N. J. Brick, 2 stories, 35x80 feet, slag roof. Owners taking sub-bids.

School Building, Glassboro, N. J., \$75,000. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owners, Board of Education, Glassboro Township, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet, slag roof (steam heating, electric lighting, plumbing and furniture reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamein doors, damp-proofing, ornamental iron work. Architect taking bids, due January 11th. R. C. Ballinger & Co., 218 North Thirteenth street;

Evans Const. Co., 9. South Eighteenth street; Wills Ludwick Co., 34 S. 17th street, Phila.; Peterson Const. Co., Clayton, N. J.; Geo. F. Shaner & Son, Palmyra, N. J.; Geo. Bachman, 19 North Thirtieth street, Camden, N. J.; Frank C. Ware, Glassboro, N. J., and W. Beaumont, 12 South Tennessee avenue, Atlantic City, N. J., are figuring.

Office and Drawing Room (add.), Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick, steel, 1 story and basement, 34x41 feet, slag roof, pine floors, steam heating, electric lighting. Owners have received bids.

Auto Repair Factory, Fourth and Arch sts., Camden, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owners, Camden Auto Radiator Repair Co., on premises. Brick, 2 stories, 47x60 feet, slag roof, steam heating, electric lighting, concrete floors, hollow metal sash and skylights, elevators. Plans in progress.

Infirmary Building, Hightstown, N. J. Architect, John F. Jackson, 1326 Broadway, New York City. Owners, Pedit Institute, Hightstown, N. J. Brick, concrete and stone, 2 stories and basement, 53x23 feet, slate roof, steam heating, electric lighting, tile and marble work, cement floors, hollow tile, metal lath, iron stairs, ornamental iron work. Revised plans in progress.

School, No. 2 (alts. and add.), Wood avenue, Linden, N. J. Architects, John N. Pierson & Son, 175 Smith street, Perth Amboy, N. J. Owners, Board of Education, Township of Linden, N. J. Brick, stone and reinforced concrete, 2 stories, 111x30 feet and 70x38 feet, slag roof, maple floors, hollow tile, metal lath, tile work, rolled steel sash, kalamein doors, iron stairs, roof ventilators, metal window guards, metal weatherstrips, metal ceilings, waterproofing and dampproofing, ornamental iron work. Owners have received bids.

Yard Office, Delaware avenue and Cooper

street, Camden, N. J. Architect, Joshua C. Jeffers, 1001 Chestnut street, Philadelphia. Owners, Victor Talking Machine Co., Camden, N. J. Brick, 1 story, 42x32 feet, slag roof, cement and pine floors, rolled steel and hollow metal sash, hollow metal doors, dampproofing (plumbing, heating and lighting reserved). Architect has received bids.

Hotel, Atlantic City, N. J., \$1,000,000. Architect, S. G. Dobbins, 18 South Virginia avenue, Atlantic City, N. J. Owner's name withheld. Stone, steel, brick, reinforced concrete, 12 stories, 110x150 feet, concrete and tile roof, vapor heating. Preliminary plans in progress. Too early for details.

Apartment House, Atlantic City, N. J., \$200,000. Architect, Bertram Ireland, Guarantee Trust Building, Atlantic City, N. J. Owner's name withheld. Brick, concrete and steel, 5 stories. Plans in progress. Too early for details.

Maryland

Construction News

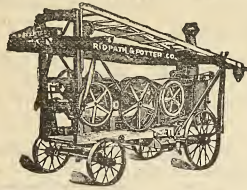
Naval Academy, (add.), Annapolis, Md., \$500,000. Architect, Chas. L. Reeder, Engr., Park avenue and Saratoga street, Baltimore, Md. Owners, U. S. Government, Bureau of Yards and Docks, Washington, D. C. Consists of additions and extension to heating, water and electrical distribution systems at Academy. Plans in progress.

School (add.), Lafayette avenue and Poplar Grove street, Baltimore, Md. Architect, private plans. Owners, School Board, City of Baltimore, Md. Plans in progress. Too early for details.

Apartments (alts.), 1604 Eutaw Place, Baltimore, Md. Architect, private plans. Owner, Geo. Lemke, 301 South Highland avenue, Baltimore, Md. Brick, 4 stories, hardwood floors, electric work, steam heating, plumbing and painting. Owner is taking sub-bids.

Garage (add.), rear 1221-3 Maryland avenue, Baltimore, Md. Architect, H. I. Kavanagh, 526 East Eager street, Baltimore, Md. Owners, Autogenous Welding and Equipment Co., 1120 Cathedral street, Baltimore, Md. Brick and

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steel, 2 stories, 96x33 feet, slag roof, ventilators, cement floor. Owners are taking bids. Singer-Pentz Co., Equitable Building; T. D. Keating, 2213 West Baltimore street, and Henry T. Sorrell & Son, 1334 North Gilmer street, all of Baltimore, Md., are figuring.

Store and Apartments (add.), 926-28 South Charles street, Baltimore, Md. Architect, J. C. Spedden, 2715 Harlem avenue, Baltimore, Md. Owner, M. Eisen, on premises. Brick, 1 story and 2 stories, metal ceilings, metal bulks, plumbing, electric lighting, steam heating. Architect taking bids. Frank Marion, 4 North Caroline street; Owens & Margolius, 422 S. Bond street, and Frank Kreamer, South Sharp street, all of Baltimore, Md., are figuring.

Service Building, Sparrows Point, Md. Architect, private plans. Owners, Bethlehem Steel Co., on premises. Concrete foundations, brick, 1 story, 34x60 feet and 34x32 feet, slag roof, concrete work, hollow metal skylights, ventilators, tile work (heating, electric work and painting reserved). Owners taking bids. In addition to those previously reported, Singer-Pentz Co., Equitable Building; B. F. Bennett Co., 123 South Howard street, and C. L. Stockhausen Co., Gay and Water streets, Baltimore, Md., are figuring.

Maryland

Contracts Awarded

Building (alts.), Highlandtown, Md. Architect, Otto G. Simonson, Maryland Casualty Tower, Baltimore, Md. Owners, Crown Cork and Seal Co., Highlandtown, Md. Consists of general interior alterations. Contract awarded to Geo. T. Monmonier, 1711 McCulloh street, Baltimore, Md.

Storage Building, northeast corner of Wicomico and Gunpowder streets, Baltimore, Md. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore, Md. Owners, Bartlett, Hayward & Co., Scott and McHenry sts., Baltimore, Md. Frame covered with corrugated iron construction, concrete foundations, 14x234 feet. Contract awarded to Morrow Bros., Fidelity Building, Baltimore, Md.

Warehouses (4), Canton, Md., \$750,000. Architect, private plans. Owners, U. S. Government, Quartermaster's Department, care of Major Strecker, Canton, Md. Concrete and steel, 1 story, approximately 180x400 feet, composition, concrete, slag or asbestos roof, electric lighting. Contract awarded to Sanford & Brooks Co., Commerce and Water streets, Baltimore, Md.

Post Office (alts.), Baltimore, Md., \$3,287. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick, consists of interior alterations, mill work, reinforced concrete, metal lath, tile, marble and terrazzo work, electric lighting. Contract awarded to Singer-Pentz

Co., Equitable Building, Baltimore, Md.

Factory (add.), Race and Ostend streets, Baltimore, Md. Architect, Charles M. Anderson, 324 North Charles street, Baltimore, Md. Owners, National Enameling and Stamping Co., on premises. Brick, 1 story, stone trim-

ming, slag roof, hollow metal skylights, ventilators, electric lighting, plastering, painting and plumbing. Contract awarded to John Waters Building Co., 23 Center street, Baltimore, Md.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, Harrison and Oakland streets, \$3,000. Geo. Edel (O and C), Hillcrest and Stenton avenue. Brick, 3 stories, 15x31 feet, slag and tin roof, hot water heating, stone foundation.

Garage, 1025 East Moyamensing avenue, \$300. J. Isvaelstan (O), on premises. N. Blumenthal (C), 313 Spruce street. Brick, 1 story, 16x13 feet, slag roof.

Office Building, Chestnut above Twelfth st., \$775,000. Mershon Bros. (O), 333 Land Title Building. John R. Wiggon Co. (C), Otis

Building. Brick and concrete, 12 stories, 66 x145 feet, slag roof.

Dwelling (3), Smick and Leverington sts., \$6,000. Martin H. Keller (O), 326 Dupont street. Wm. E. Keller (C), Green Lane and Mitchell streets. Stone and brick, 2 stories, 14x30 feet, slag roof, hot air heating.

Machine Shop, Girard avenue and Front street, \$900. Espen Lucas Machine Co. (O), on premises. The Austin Co. (C), Bulletin Building. Brick, 1 story, 18x13 feet, concrete roof.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, Rosewood and Clearfield streets, \$450. Harry Beik (O), 1417 W. Clearfield streets. Harry S. Schmid & Co. (O), 1911 W. Allegheny avenue. Alterations.

Office, Delaware avenue and Wolf street, \$1,000. Richard Hamilton (O), on premises. Roger Atkinson (C), 24 South Seventh street. Brick, second-story addition, 16x35 feet, slag roof.

Warehouse, 38 North Delaware avenue, \$500. T. H. Perot Est. (O), on premises. H. H. Burrell (C), 206 South Quince street. Fire repairs.

Dwelling, 1440 Rush street, \$300. Viggo Zensen (O), 1430 Glenwood avenue. Howard Jones (C), 1339 Siltzen street. Alterations. Engine Room, Thirty-first and Jefferson sts., \$18,000. F. A. Poth & Sons, Inc. (O), on premises. Chas. H. Casper (C), Hornor Building. Brick, 2 stories, 33x47 feet, reinforced concrete, slag roof.

Store and Dwelling, 323 South street, \$4,000. J. Malis (O), 321 South street. J. Gorchov (C), 4116 Girard avenue. Mill work,

plastering, new stairway, plumbing, fire damage.

Store and Dwelling, 500 Richmond street, \$500. Denis McIntyre (O), 1003 Palmer st. S. S. Sanders & Bro. (C), 519 Richmond st. New flush bulk and alterations.

Boiler House, Ontario and Janvey streets, \$800. Bogar & Co. (O), Crawford and Janvey streets. Budd & Grate Co. (C), 2013 East Letterly street. Boiler setting.

Garage, Twenty-third and Walnut streets, \$1,950. Phila. Auto Trades Assn. (O), Broad and Callowhill streets. J. Sims Wilson Co. (C), 1125-27 Brown street. Temporary stands.

Factory, Thompson and Hutchinson streets, \$1,000. H. J. Mess (O), on premises. Wm. Steele & Sons Co. (C), 30 South Fifteenth st. Alterations.

Dwelling, 1926 East Lehigh avenue, \$300. S. J. Nagel (O), on premises. Wm. Leachner (C), Somers Point, N. J. Alteration.

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THE GENESIS OF THE AMERICAN COUNTRY HOUSE

It is about three hundred years since Francis Bacon—courtier, philosopher and essayist—in his famous essay "Of Houses" (which so many have heard of and so few have read), painted an interesting word-picture of the ideal country house of the English gentleman of his time. Reading that essay one recognizes how persistent are the factors of good house design that underlie all changes of time and style. Making due allowance for differences of detail, the model country house or manor of the Elizabethan and Jacobean periods in England offers types of plan and mass which many a wealthy American of the twentieth century has been glad to have his architect follow. For after all, aside from changes in methods of heating and lighting and transportation, the chief alterations brought by the centuries to the building of houses are social changes. The plan of the Roman villa was arranged with reference to the services of hundreds of slaves and to dependence as far as possible on favorable exposures for light and heat. The English gentleman, living in a colder climate, necessitating multitudinous fireplaces and steep roofs, commanded the service of a large but limited number of paid servants; hence the more compact plan built in two or three stories, with high roofs, gables and chimneys. In the American country house there is smaller provision for the housing of servants, because these are fewer than for the corresponding type in England, while labor-saving conveniences are more numerous and efficient. The English keep their doors closed; we like to keep our open and on occasion to "throw the ground floor rooms into one." The "living room," piazza and sleeping porch are peculiarly American. With scantier domestic service than prevails in England, the convenience of ample closets for all bed rooms becomes more important, and bath rooms are multiplied. The traditional portable tin bathtub, with cans of hot and cold water brought each morning by serviceable menials, ministers to man yan Englishman's sense of established rank. He prefers thus to be served by a host of inferiors rather than by pipes and apparatus operated by his own hand.

Social custom and domestic service, heating and lighting within the house, and climate and materials without—these are the controlling factors in the genesis and development of domestic architecture in general and in any given place and period. In the matter of architectural style, the country house has, of course, always been subject to the style-forming influences of its time, but less impressively than civic or religious architecture. The more modest the scale and pretension of the house, the more has it felt the influence of local and individual traditions and tastes. Oftentimes, for this reason, the cottage and the house of moderate cost are more interesting than the splendid mansions of noblemen and millionaires.

Francis Bacon (I must get back to my text for once at least) was still living when Raleigh's colonists first settled at Jamestown and when (1607) the first New Englanders landed at Pemaquid, Maine, thirteen years before the Mayflower dropped anchor at Plymouth. The Jacobean style prevailed in England, for Inigo Jones was still a young man and Wren was not yet born. But no Jacobean mansions rose on the shores of New England or Virginia. Log cabins and a strenuous fight with Nature and savages must be the colonists' portion for generations before fine houses of wood, stone or brick could rise in the wild Western land. Forests must be hewn down, roads be built, commerce and trade be developed before luxury or splendor could appear. That is why the earliest reflection of the prevalent style of the motherland was not of Jacobean but of Georgian models. Previous to (say) 1725, the exiguous resources of the colonists, the abundance of timber and the scarcity of stone, or at least of capable stonemasons, had compelled the development of interesting types of wooden houses, of which a few examples still remain—clapboarded or shingled, gambrel-roofed, sometimes with an overhanging upper story adorned with hewn pendants. Even the brick houses of the James River tobacco planters were of the simplest architecture, until growing wealth, in the eighteenth century, permitted more ambitious architectural efforts.

These early developments in house design constitute the most characteristically and exclusively American phase—or style, if you please—of our national architecture, owing less than any later phase to foreign traditions; at least until the eighties of the last century, to which I shall ask attention on another page.

Many European critics have failed to apprehend the true philosophy of a Colonial civilization and art. Here was the first instance in modern history of the establishment on a virgin and savage soil of communities of highly civilized immigrants, bringing with them ideals, customs, traditions, which they sought to replant in a new and wild environment. Not all these seeds of culture could spring up under these alien conditions; some came up in new and strangely transformed guise; some, like the ideals of civil liberty and democracy, flourished as never before. The architecture of the home-land could not be reproduced. The materials, the resources, the domestic service, the social conditions of the mother country were wanting. The new society was absolutely democratic, the climate severe. The first necessity was the cutting down of the forests, to provide at once land for tillage and wood for fuel and building. It was a race of carpenters that grew up, not of stonemasons. Except in a few localities, where abundance of clay or easily worked stone compelled the use of those materials, wood became our national building material and shingles took the place of tiles and slate. A severe winter climate dictated low ceilings and compact plans, and in New England and parts of New Jersey the gambrel roof provided an additional story at little cost. The interior was devoid of other ornament than simple wainscot in white pine and an equally simple mantelpiece.

Some of these early features persist to the present day. The gambrel roof, clapboards and shingles for siding, and the double-hung instead of the casement window have come to us from the seventeenth century. The compact planning of our smaller houses, the multiplication of closets and cupboards and the persistence of sizable fireplaces for wood are also inheritances from the pre-Georgian period. In England the scarcity of wood fuel has compelled the general giving up of the wood fireplace and the general adoption of the small open-grate fireplace for soft coal.

These simple wooden houses were the rational product of the new conditions under which the Colonial culture, brought from the old homes, expressed itself in new forms, seeking to reproduce the substance of the old life as best it could, and thereby creating unconsciously a new culture in the new home.

When, however, the primitive conditions of the earlier colonization had disappeared and a measure of wealth and material prosperity had developed out of them, the influence of the arts of the motherland began to make it-

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self felt. From her they drew all they could afford of the material embellishments of life and reproduced as much of its outward semblance as they had skill and means to imitate. Maritime commerce—what Mrs. Hodgson-Burnett has called "the shuttle" between the Old and New Worlds—was linking together the arts and life of motherland and colonies. Thus began the second stage of our Colonial culture, that of the eighteenth century, the age of Queen Anne, William and Mary and the first three Georges in England. In this stage the arts began to flourish, partly by direct importation from England, partly by close imitation of English forms, furniture and dress, partly by the modification of English products under the pressure of new conditions both economic and social. We can imagine the bluff-bowed ships of the eighteenth century bringing over not only broadsides and broadcloths, mahogany furniture and silver and china, but also twisted stairbalusters of mahogany, and carved moldings and mantelpieces, and pattern books for the carpenter-architects. There would be now more call than formerly for skilled artisans in woodwork to emigrate to the new country, and for native apprentices to learn the finer art that was becoming fashionable. Thus a native American house art grew up, based on the Georgian in its details, but fitted to the simpler life and wooden construction of the North, or the more aristocratic slave-owning plantation life of the South, where brick was abundant and cheap, and where the warmer climate demanded the shade and shelter of wide verandas or "galleries" in one or two stories. Our house types of the eighteenth century, though rebelling the English influence, as was natural and proper, were peculiarly and wholly American.

We of to-day have learned to know our Colonial types fairly well; they have been abundantly documented and reproduced. Their dignity, refinement and charm are best appreciated by those who have tried in their own practice to reproduce these qualities. With my present limitations of space it would be superfluous to rehearse the general features of these types: they are familiarly known to architects and to many discriminating clients. The modern revival of the style, is justified by the merits of the eighteenth century work, both practical and artistic.

With the close of the eighteenth and the beginning of the nineteenth century began the period of the classic revival of which Thomas Jefferson, as Professor Fiske Kimball has shown, was one of the most enthusiastic promoters, if not the pioneer. French influence replaced the English to a considerable degree for a while after the Revolution; while the development of civic architecture in the new State capitals and growing cities led to a more severe and monumental treatment of house architecture, at least in the larger and

richer types. The smaller houses continued to be built on the simple and unpretending lines of the earlier age.

(Continued Next Week.)

THE ENDURING QUALITY OF WOOD.

The stanch condition of some old New England homestead, built in pre-revolutionary time and still serving its purpose, is commented upon from time to time, as such an old house is being torn down, or perhaps is being remodeled. Surprise is expressed at the fine preservation in which the wood is found after the lapse of so many years, perhaps centuries.

Such comment mentions the old Fairbanks Home, in Dedham, Massachusetts, as the oldest frame house in America, having been built in 1636. It is a little startling to us in this "new country to think of a house which has withstood the vicissitudes,—not only of so long a period of years, but of such a range of events as must have circled a house built so soon after the landing of the Pilgrims in New England. It is not unusual to see old world buildings,—in many of which wood is the chief factor, as in oak paneled English halls,—which have stood for longer periods and whose beauty has grown with the passing years.

Tradition says that Jonathan Fairbanks and his good wife, with their six children, came to Boston from Yorkshire, England, in 1633, and three years later moved to Dedham, where they erected what is now the central portion of the Fairbanks house, two wings having been added, one in 1648 and the other in 1651.

Timbers used in the old house were brought by Mr. Fairbanks from England, and the bricks in the chimney are said to have come to this country as ballast in ships. No two windows in the house are of the same dimensions, and contrary to colonial custom, neither the huge chimney nor the front door are exactly in the center of the house.

The front door, which is entered from the east, is unusually low and leads to a tiny entry eight feet in width and three and one-half feet in depth. Out of this diminutive hall lead no less than five doors.

The parlor to the right, as you enter, was plastered by later generations and in other ways is more modern. But the kitchen, to the left of the entry, is truly antique. The visitor's attention is here attracted by a fireplace, originally 7 feet 2 inches in length and five feet in height. An oven was installed in later years, making it considerably smaller. From the fireplace hang a bellows, tongs and various cooking utensils peculiar to colonial times. The imported timber shows prominently in the ceiling of this room.

A winding staircase leads from the entry to the second floor, where there are two rooms, one a bed chamber and the other a spinning room, where an old hand loom may be seen.

Many yards of plaster clay, used by the colonists as further protection from the wintry blasts, may be seen worked into the ends of the attic.

The wing on the northerly side of the original house, which was built in 1648, was the home of John Fairbanks, the eldest son, who was married in 1641. From the fireplace in the larger room still hangs a wooden crane five feet long, and on this crane were suspended grease lamps called "widders" or "old Betsy" to light up the room during the long winter evenings. A small living room adjoins.

In 1901, the Fairbanks family in America was organized to preserve the house as a museum of colonial date.

HOME BUILDING PART OF WAR WORK.

Philadelphia is not losing its distinction as "The City of Homes" because the building record for the last year has decreased. The Bureau of Building Inspection has compiled figures showing that the valuation of buildings authorized during November fell \$315,000 below the total for October. Figures for the first eleven months of the year show a decrease of \$11,000,000 in comparison with 1916, a loss of a million a month. The record for November, 1917, is the lightest since November, 1914, the first year of the war. Then business men were too timorous to undertake building on account of the "hard times" period precipitated by the conflict overseas.

The reason for recent decrease in construction is the very opposite—it is spelled in the letters of prosperity. With the engagement of the United States in the war, war work assumed the right of way, temporarily diverting all available labor and materials to its purposes. Activities which had not an apparent bearing on victory have been crowded aside till the day of peace. Building is not such an activity. Homemaking must wait. It is an essential part of war work for victory.

It is true withdrawal of large numbers of men to the camps, the front and the outside war industry plants is relieving congestion otherwise inevitable in an era of restricted building operations. But housing is a definite necessity for the thousands of workers who are coming here to shipyards and munition factories. It is impossible to obtain a small house at a reasonable rent in the city or its suburbs. Many skilled workers will become part of its citizenship after the war. To house them now is a problem very readily solved. The Government should issue a priority order in favor of this city for needed building materials.

Philadelphia must rise to the occasion, provide houses and live up to its title of "The City of Homes" by largely adding to the 400,000 already within its zone.—"Philadelphia Public Ledger."

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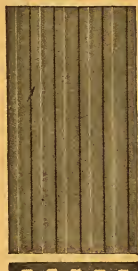
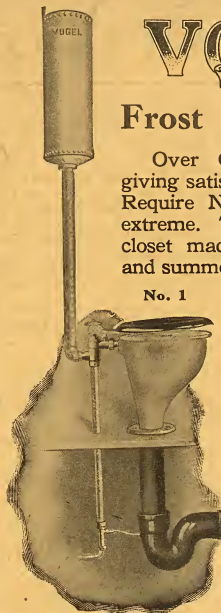
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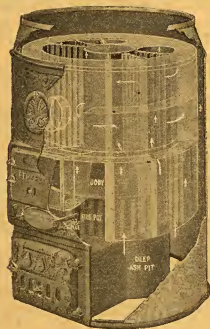
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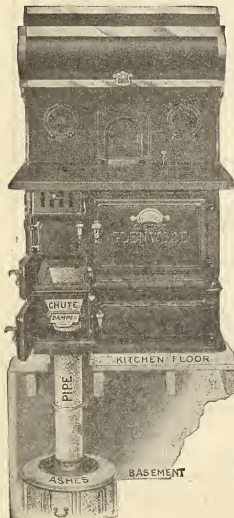
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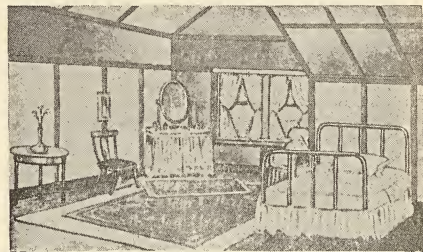
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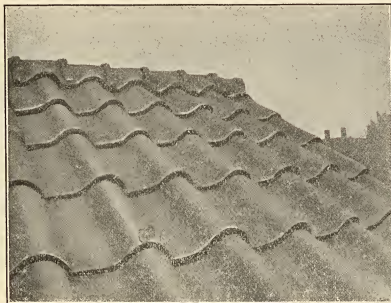
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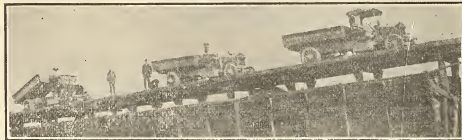
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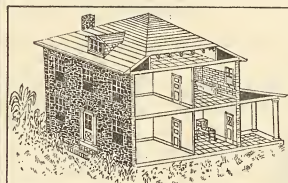
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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As The Editor Sees It



NINETEEN-SEVENTEEN passes into oblivion the most depressing year in the history of American building. America's entry into a war dwarfing, in the number of nations involved and men engaged, all previous wars of which the world has record, was, it should be needless to state, the major disturbing element.

Capital is proverbially timid. It was quite natural that investors should ask something in the form of reasonable assurance for the future before making vast outlays. As nobody was prepared to say with authority just what would happen as a result of our entry into the world conflict and as everybody seemed to recognize the possibility that all sorts of things might happen there was a more or less general disposition to lie back and await developments before breaking ground upon contemplated new work.

Among the immediate consequences of the situation created by our active participation in hostilities were, first, a more or less sharp and sudden advance in the price of materials used in buildings; second, an equally sharp advance in wages in nearly every branch of the building trades, and, finally, the outcropping of a situation of some seriousness in the matter of deliveries, notably in the cases of structural steel and in a minor degree in the case of other materials. And by way of accentuating the general complexity of affairs there came in swift progression the draft, military and mechanical, leav-

ing in their wake a labor shortage that for a time threatened to cripple various industrial lines, building included.

And, as if this were not enough to give the investor, the builder and the home operator the fantodos minor difficulties began to set in, difficulties related to freight congestion, car shortage, coal scarcity and federal commandeering of steel with the result that, aside from government cantonnement work, industrial buildings buildings made necessary by the extraordinary development in munition-making, ship yard and similar construction, and colonies of small, standardized dwellings designed for the housing of industrial workers, building activity in the sense in which usually we understand it practically ceased to exist.

* * *

LOCALLY the year showed a falling-off from the record of 1916 of \$15,000,000. The closing month alone, December, declined nearly \$800,000 from the total of building expenditure for December a year ago.

According to figures compiled by the statistician of the Philadelphia Bureau of Building Inspection permits issued during December were 251 as compared with 587 last year; operations were 265 as compared with 1,080, and valuation was \$684,720, compared with \$5,461,065.

During the year 6,490 permits were issued compared with 8,838 in 1916; operations were 8,977 compared with

15,613 and valuation was \$33,961,120 compared with \$49,896,570 in 1916.

In accordance with our established custom we present on another page of this number of THE GUIDE a detailed tabulated statement of the permits for the year.

With the insistent demand for cash to prosecute the war and launch commercial enterprises it followed necessarily that there would be a retrenchment in the supply of mortgage funds. The tendency among lending institutions has been to require a reduction of their maturing loans on maturity and an increase from one-half to one per cent. more interest on renewals and new business. It is predicted generally that amortization clauses will be inserted in future mortgage contracts.

Little or no money is available for new building operations. High prices of materials and unsettled conditions in the building trades are militating against the launching of new building operations on a large scale. Whatever new projects may be undertaken within the next few months in all probability will be financed by private capital.

* * *

BUILDING material interests are working in unison to convince the federal authorities of the absolute necessity of giving them free rein so as to be ready to meet any emergency demand that may arise for building accommodations, especially since the

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country is suffering from under-construction. The demand for housing of industrial workers is becoming more acute every day in practically every centre where war contracts are being filled. The establishment of shipyards and other munition works in remote districts, where housing and transportation facilities are practically nil, calls for prompt action on the part of the government to supply capital for the erection of workmen's homes.

The incoming administration is understood to be committed to a policy that will be most helpful to reality. If so, it will profit by past experience and at once relieve reality of the burden of overinspection and multiplicity of orders emanating from various city departments. Those orders have been a source of unnecessary annoyance and embarrassment to owners as well as a source of inexcusable waste of money and effort. A consolidation of the various departments having jurisdiction over buildings should be grouped under one head.

* * *

COMMENTING on the conditions responsible for the widespread letting-down of building activity in all parts of the country *The New York Times* remarks:

The building field, so closely allied with the money market, was profoundly affected by the financial stringency, and the speculative builders, dependent upon building loans, were practically forced to suspend operations. Construction work, however, involving industrial properties to meet war needs, continued on an unprecedented scale. Increased Government demands encouraged additional building of this character.

But labor became scarce, material prices soared to unheard-of heights, and congestion on the railroads hampered and delayed deliveries. With these deterrents, on the one hand and a lack of building loan money on the other hand, the general building situation became critical and operations of a private nature were brought almost to a standstill.

Aside from a period of high-class private residence construction in both city and suburbs and the erection of new industrial plants or additions to existing plants, building operations of the year concerned themselves chiefly with governmental requirements. Several new office and loft buildings and apartment houses fortunate enough to obtain materials and deliveries, were able to be completed, but they contributed little to relieve the startling shortage of both residential and business space that developed as a result of the decline in construction generally.

ON the subject of this housing demand *The Times* says:

The demand for apartment house, loft, and office space began to exceed the supply and property owners early in the year commenced to experience one of the best renting periods in the history of real estate. Modern space has practically all been absorbed, rents have risen, and from the income-producing standpoint, in spite of increased operating costs, many properties, hitherto unproductive have been placed on an excellent investment basis.

Probably the most important development of the year in the real estate world, has been this phenomenal renting season, inspired by the double spur of tremendous commercial and population growth and lack of new buildings.

That more investors have not sought to capitalize this ideal situation is traceable both to the causes already outlined and to other deterrents that have been operating to discourage the buying of real estate.

* * *

GOVERNMENT construction during 1918 will probably be unprecedented in American history, as it is predicted that official cognizance must soon be taken of the startling shortage of residential space, particularly in the districts where the huge munitions and allied industries are working under capacity pressure. This will mean that huge Government loans will be released for the continued expansion of America's vast industrial system.

The prevailing opinion is that there is no need for pessimism on the part of real estate interests or any other interests. As one real estate man aptly expressed it, the slogan for 1918 should "Pigeonhole the hammer."

* * *

VARIOUS expedients have been advanced to alleviate the extraordinary demand for housing accommodations, expedients ranging all the way from a readjustment of mortgage requirements and down to a suspension for the war period of the municipal regulations governing new construction. Under the heading "Old and New Dwellings" the *Evening Bulletin* printed recently an interesting discussion of this latter suggestion as it applies to Philadelphia. Said the *Bulletin*:

Will the war work a change in the character of Philadelphia's building construction? Already there are signs that a temporary modification of the municipal regulations may be sought, for with a demand for dwellings running ahead of the supply there is an inducement afforded the operative builders that has been lacking of late years in a well-sup-

plied market. But the high cost of materials is the counter-active that has to be overcome, and architects and builders are engaged throughout the country in finding ways and means of cutting building construction costs during the war in order to take advantage of an exceptional and abnormal demand.

It is said, that if the Government builds its proposed colony of 7,500 dwellings, for the accommodation of the Hog Island workers, it may erect the houses entirely of frame, constituting the largest operation of that type Philadelphia has ever contemplated. For the city has been known from the time of Penn as a place largely of brick dwellings, a fact that has gone far to keep from it the destructive conflagrations that have swept all other large cities of the United States. Ordinarily, not more than one or two frame houses a month are erected in Philadelphia, the area in which they are permitted having been restricted closely and being limited steadily.

* * *

ONLY half a dozen areas within the city are now open to the erection of frame houses. The largest unrestricted area, in this respect, at present is the Thirty-fifth Ward, lying along the line of the Northeast Boulevard and east of 5th street. But under the two hundred foot ruling for the protection of parkways no frame building can be erected within that distance of the Boulevard, Frankford, Bridesburg, Wissinoming, Holmesburg and Tacony contain limited areas in which frame houses are permissible; Roxborough and the part of Manayunk nearest the Wissahickon valley are exempt from the all-brick rule. Woodside and Point Breeze parks are exempted. The section of the Thirty-ninth Ward east of 7th street, and south of Oregon avenue, is within the frame building district and, in lower West Philadelphia, the erection of wooden dwellings is confined chiefly to the lands immediately in the rear of Hog Island.

But the Government may overstep these rules, it is said, by acquiring any plot in the city, thereby making the area "government land" and subject only to Federal regulations, as the powers of the Bureau of Building Inspection do not extend to the control of Federal structures, which may be erected out of any materials and in any manner approved by the authorities at Washington.

* * *

RECENTLY Mayor Smith approved an ordinance which has for its purpose the facilitating of a new type of dwellings, of hollow-tile blocks covered with a coating of plaster. The terms of the ordinance in the main

embody rules prepared by the Bureau of Building Inspection and approved a year ago last June by Director Wilson, of the Department of Public Safety. The rules, which provide for the use of hollow-tile in place of solid clay bricks for the walls of detached buildings, one story in height, and detached dwellings, stables and garages not more than three stories in height, have been extended by Councils to include semi-detached dwellings as well. The tiles have to fulfill specified tests as to strength, with outer walls of not less than seven-eighths of an inch thickness and have to be laid in such form that the joists or beams do not rest the floor loads on tiles set so as to form a continuous hollow space extending down to the foundations.

Although the rules have been effective for a year and a half, so far there has been little of this type of construction in Philadelphia and the ordinance is viewed as a protective as well as a permissive measure. Whether the tile wall is as durable as the similar brick wall is uncertain in view of the recent development of this type of building, but it is said that although it is a fire-resisting material, when a stream of water is directed against a highly-heated hollow-tile wall it displays a tendency to shale and crumble.

ANOTHER Bureau rule that has now become a municipal ordinance permits the use of wooden shingles on all sloping roofs, without a flat top surface, on semi-detached and detached dwellings in the "suburban districts," provided the walls are eight feet removed from the nearest party line. This type of roof has been permitted for years in the outlying wards, but has now received the sanction of Councils. The determination of what areas are "suburban districts" is a matter of discretion with the Building Bureau; in general it embraces the Twenty-first, Twenty-second, Twenty-third, Thirty-fifth, Forty-first and Forty-second Wards, extending across the northern part of the city from Manayunk to Holmesburg. The shingle roof, no less than the frame dwelling, however, was a matter of concern to the early builders who strove hard to keep the city free from the dangers of fire, yet the rapid growth of the city into regions that were recently rural or suburban has brought up the question whether the regulations for the older sections should not be continuously extended apace with the expansion of the urban areas.

THE ordinance dealing with this question of hollow tile walls and shingle roofs was printed in full in a recent number of THE GUIDE.

convention and exhibition in New York City, February 12, 13, 14, 15, 1918. Headquarters at the Hotel Astor.

William A. Del Mar, recently assistant electrical engineer for the Interborough Rapid Transit Company of New York, has become chief engineer for the Electric Cable Company and the Habirshaw Electric Cable Company, Inc.

American Road Builders' Association will hold its fifteenth annual convention in St. Louis, Mo., during the early part of February, 1918.

P. H. Chase, who was assistant engineer with the Public Service Electric Company, of Newark, N. J., has become the electrical engineer for the American Railways Company, with headquarters at Philadelphia, Pa.

American Concrete Institute will hold its annual meeting in Chicago, Ill., February 7 to 9, 1918. Secretary, H. B. Alvord, 27 School street, Boston, Mass.

The American Packing House Engineering Co., 126 Liberty street, Manhattan, has recently taken bids upon a general contract for the construction of a six-story reinforced concrete factory, 90x120 feet, to be occupied by the Van Iderstein Company, soap manufacturer. This structure will be located on Newtown Creek, Long Island City, and will cost in the neighborhood of \$75,000.

Plans are nearing completion in the offices of York & Sawyer, architects, 40 East Forty-first street, New York City, for the hospital to be erected at Lincoln avenue and Frankfort street, Orange, N. J. This structure will be for the use of the Orthopaedic Hospital and Dispensary of New Jersey, 148 Scotland road Orange, N. J., owner. The proposed building will be constructed of hollow tile, stone and stucco, fireproof, and will be three stories in height, with basement. The structure will have ground dimensions of 66x132 feet, with extension 44x72 feet. Included in the project will be a gymnasium and other special rooms, in addition to the regular hospital features.

The Board of Supervisors of Nassau County, N. Y., have retained Tooker & Marsh, architects, 101 Park avenue, Manhattan, to prepare the plans and specifications for the tuberculosis hospital to be erected at Massapequa, L. I. The proposed building will be one story in height, but the dimensions are as yet undecided. The cost will be approximately \$60,000.

Plans are being prepared privately for a large factory building to be erected in Long Island City for the Pittsburgh Plate Glass Co., Richard T. Conley, New York manager, 322 Hudson street, Manhattan, owner. The structure will be located on Hunters Point avenue and will be built of brick, mill construction, one and two stories in height. According to the tentative plans the total building will have ground dimensions of 280x264

EDITORIAL NOTES

Price & McLanahan, architects, 1418 Walnut street, Philadelphia, announce that they have admitted, as a partner in the firm, Mr. Ralph B. Beneker.

Frank W. Hall has been appointed commercial manager of the Sprague Electric Works of the General Electric Co., New York. With the exception of a short period, Mr. Hall has been connected with the Sprague works continuously for twenty-two years in various engineering and sales capacities, and for the three years prior to his present appointment occupied the position of sales manager. D. C. Durland, former executive head of the Sprague Electric Works, has resigned to accept the presidency of the Mitchell Motors, Inc.

C. H. Vom Baur, after seven years' experience in the electric steel industry in various capacities, has opened an office at 30 Church street, New York, where he will practice his profession as a consulting engineer and also handle the sale of an electric furnace of his own design.

Cantor & Dorfman, architects, 373 Fulton street, Brooklyn, announce that they have dissolved partnership. Mr. Cantor will continue

the practice of his profession at the present address and Mr. Dorfman will establish his offices at 26 Court street.

The Contractors' and Builders' Show, successor of the annual cement show, planned to be held in Chicago, February 6 to 13, has been postponed on account of the generally unsettled building situation throughout the entire country.

National Association of Sand and Gravel Producers will hold its annual convention in Chicago, Ill., February 7 to 8, 1918. Headquarters will be at the Great Northern Hotel. An interesting program has been prepared and open discussions will be conducted upon a number of live topics.

Waldo S. Coulter, until recently of the firm of Hansen & Coulter, consulting engineers, which has now dissolved, has opened offices in the Engineering Building, 29 West Thirty-ninth street, New York, as a consulting, designing and supervising engineer.

Pennsylvania and Atlantic Seaboard Hardware Association and the New York Retail Hardware Association will hold a joint annual

feet, and the two-story portion 200x200 feet. The cost of the project is estimated to be approximately \$400,000.

McKim, Mead & White, architects, 101 Park avenue, New York, have been retained to prepare the plans and specifications for the five-story brick and stone clubhouse to be erected at 113 to 123 West Forty-third street. This structure will become the home of the League for Political Education, Civic Forum and Economic Club. The ground dimensions of the proposed building will be 100x120 feet.

There are a number of large and important projects on the boards in the offices of prominent architects, and recently there have been a goodly number of new operations out for estimates, but it cannot be expected that these structures will be commenced while this weather lasts. The manufacturers of building materials and supplies have suffered severe setbacks also, as the scarcity of fuel has hampered production greatly, and some of the producers have found it necessary to shut down their plants and factories while waiting for fuel and raw materials. The railroad situation is slowly being untangled, and it is confidently expected that before long the traffic conditions will be materially improved through Federal operation of the lines. While it is true that all Governmental business will receive preference over the lines, the general operation of the railroads will be co-ordinated and systematized and that the transportation of freight will be an easier matter than it has been for some time past.

Although building construction is at present practically at a standstill there is considerable promise for the future. From all parts of the local territory reports are current that lead to the opinion that with the advent of spring a strong building movement will be started. The suburban districts will unquestionably lead in this movement, as there has been an intense demand during the past year for small houses. Plans are under way for the construction of dwellings of moderate cost on a large scale, and some of the towns within easy commuting distance are actively preparing for a busy building season.

For all branches of the building industry the new year seems to give much promise. While it cannot be expected that material improvement in the situation will be possible for the next two months or as long as the inclement weather lasts, reports from practically all parts of the country are unanimous in admitting the demand for hundreds of additional buildings to house the industrial and commercial activities of the nation, and thousands of small houses, apartments, stores, schools and other community projects to provide accommodations for the rapidly growing population of the country. The expected building movement must shortly be started, and when it comes it will bring with it capacity business for all of the various branches of the building industry.

Colgate & Co., of Jersey City, manufacturers of soaps and perfumes, bought from the Land Filling and Improvement Company, a tract of about twenty acres at Newark, N. J., fronting on Newark Bay, through Joseph P. Day and Frank J. Bock, of Newark. The property just acquired is in the meadow section of Newark, not far from the Port Newark Terminal, and accessible to the industrial section of the city. The buyers will improve the property with an immense plant.

A clause in a contract provided that a corporation was "to receive for its entire compensation for services in so doing (i. e., building) a sum equal to 10 per cent. of the entire cost of the building." The New Jersey Court of Errors and Appeals holds, Shaw vs. G. B. Beaumont Co., 102 Atl., 151, that under this clause the corporation was not entitled to receive for its services, in addition to the 10 per cent. called for by the contract, the proportion of the salaries of its officers and office employees while supervising the construction of the building, nor 10 per cent. of the cost of financing the building when the disbursements in connection therewith had been allowed.

ed, nor for telephone calls, carfare, postage, stationery, as these were office charges of the corporation, nor tools used in the construction of the building, as these were part of the equipment of a contractor. It was also held that after the building was completed, the corporation, having become a mortgagee in possession, was not entitled to compensation for services rendered for renting the premises, an apartment house.

"Adelphia Appliances that Are Worthy of Your Inspection and Confidence" is the title of a very effective folder recently issued by the Borden Stove Company of Philadelphia to call attention to a few of the more widely known of the heating specialties of the Adelphia line. Well-made cuts show the Adelphia Twin-Fire coal and gas range, the "Adelphia" Boiler for steam or hot water heating, the "Adelphia" warm air heater, the same concern's direct action gas range, the Crown-Adelphia tank heater and the "Adelphia" refrigerator. The accompanying text is confined to an admirably plain statement of the good points of each of these well known leaders. The main office of the Borden Company is at 1313 Arch street, Philadelphia.

THE GENESIS OF THE AMERICAN COUNTRY HOUSE

(Continued from Last Week.)

Then came—in the thirties and forties—the Greek movement, which produced not a few charming houses as well as many white pine cottage travesties of the Parthenon and Theseum. To this date belong the greater part of the Ionic porticoes, reaching through two stories, of the Northern cities; a type not unknown in the late eighteenth century, though at that time of Roman rather than Greek type. Domestic architecture became more artificial, affected, sophisticated, lacking the naive charm of the Georgian houses. Artistic taste had begun to decline with the growth of industrialism due to railways and steam manufacture. The railway and steamer and steam sawmill killed the individuality of hand labor and local methods. The ordinary house became a plain or ugly rectangular, gabled box, without charm; and the jig-saw and band-saw dealt the final blow to good taste. The carefully working local house carpenter of the old type disappeared and the architect had not yet taken his place. Books of designs for Italian villas, Gothic cottages and stables and English manors provided the exterior designs and sometimes the plans for ambitious house-builder-owners, and the mills supplied the windows, doors, trim, turned piazza posts, moldings and jig-sawed cornice brackets and piazza details.

The plan was without charm, as was the detail. The hall was narrow, the stairs straight, the chimneypieces monuments of ugliness in slate or marble; black walnut sup-

plied the acme of splendor for interior finish, and the plaster ceilings and cornices were frightful atrocities, commercially produced by foreign workmen. So matters went through the Civil War period, which came to a close in the late seventies with the domination of the "fashionable" mansard roof and the supremacy of commercial millwork decoration; and thus ended the darkest period of American domestic architecture.

The beginning of the present-day era of house design may be dated from 1876 or 1880, as one pleases. We all know that shortly after the Centennial Exhibition at Philadelphia in 1876 there began a forward movement in taste and in the arts in the United States, which has continued to the present time through a variety of phases. By 1880 the various forces and influences that were to remake American taste had begun to influence architecture, in house design as well as in civil and monumental and ecclesiastical buildings. Mr. H. H. Richardson was establishing the vogue of his very personal interpretation of the Romanesque of Southern France, which he employed with amazing cleverness in both city and country residences. Scores of imitators tried to equal his picturesque and powerful creations with varying success. At the same time a group of designers, among whom McKim, Mead and White were the most prominent exemplars in New York, were developing an equally new type of design in shingled cottages with ample piazzas and irregular roof

masses over studiously irregular plans. The plan of this sort of design was sound enough, though the results varied from a charming simplicity to the most extravagantly affected promiscuity of detail and effect. The fundamentals of this phase, which lasted from 1880 or 1882 until about 1895, were the frank expression externally of the plan; the shaping of the plan to meet the special requirements of the family life, with no effort after formal symmetry; the enlargement of the entrance hall with its stairs into a living hall with fireplace; the provision of abundant piazzas, bay windows and "nooks" of various kinds; the use of shingles, both plain and cut, clapboards and (rarely) half-timber, stucco, or even brick or stone in the walls. The dominant note was the pursuit of the "picturesque," and the style, although it bore not the remotest resemblance to anything English, was popularly dubbed "Queen Anne."

We smile to-day at some of these houses of the eighties, but they were comfortable houses, planned from the inside out—a tremendous advance on previous ideas. They were sincere efforts to produce rational and artistic dwellings, and they formed a new and praiseworthy chapter in our house design, purely American, and as such were admired and praised by foreign writers of that time and by the late Montgomery Schuyler in his "American Architecture," published in 1893.

Contemporary with this development another most important movement was gathering strength—the Colonial Revival. I can well remember the early indifference of most of us old-timers toward the enthusiasms of the pioneer students of our pre-Revolution architecture and our gradual awakening to its interest and charm. During the late eighties and the nineties books with measured drawings and photographs were multiplied on the subject; local interest was aroused in the important centres of that architecture, and both owners and architects, in increasing numbers, turned to Colonial models, especially for the larger and more ambitious types of country residences. The art of gardening began to receive attention. Our architects were better educated, their draftsmen better trained than formerly, thanks to Paris and the American schools. Houses were better planned, better detailed, with more artistic interiors to meet the requirements of an improved public taste. English models began to reappear, and Elizabethan and Jacobean houses of great size and splendor, with terraces and gardens inspired from English exemplars, began to divide honors with those of Colonial type.

Thus strangely, yet naturally, has it come about, through the growing intercourse with the motherland, through the constant weaving of "the shuttle" across the ocean, by which now the two lands and peoples are bound together in a common warfare for common ideals of freedom and democracy—thus has it come about that the architecture of Francis Bacon's time has at last found recognized descendants on this side the Atlantic. Or to change the metaphor, the old English tree has dropped its later seeds where they could be borne

across the seas and find a congenial soil in which to spring up into a new American life. The shingled cottage with gambrel roof, the Colonial mansion, the Jacobean country house in its American guise, are each typical products of the composite internationalism and intense Americanism of our twentieth century culture.

WHERE DOES ROOF OF BUILDING BEGIN AND END?

The courts are going to be called upon some of these days to decide where the roof of a building ends and the dome begins; whether a painter who takes a contract to paint the roof of a school building should also paint the belfry, and whether the inside of a belfry is or is not a part of the walls of the building.

The problem is an important one. It is as important as the old-time discussion as to whether the nose was made for glasses or glasses made for the nose. A Chicago contractor had the contract to paint the roof of the Lincoln street school building in this city. Another painter was to paint the walls. The Chicago man painted the roof of the building and departed. There is a dome on the building and it has a roof on it. But the Chicago man did not paint the roof of the dome. He ruled that it was not properly a part of the roof of the building and that his contract did not call for the dome. The man who was to paint the walls ruled that the dome was not walls and he did not paint it.

And so we are facing the problem as to whether or not a roof is a covering. If a roof is a covering and the roof is taken off the dome of the school building the building would leak. It would appear then that the roof on the dome is essential to keep the kiddies in the building dry. But the Chicago painter declares that the roof on the dome is not a part of the roof of the building, leak or no leak. And the local painters bear him out. But the fact remains that an unpainted dome sticking through a newly painted roof looks so shabby that the courts ought to rule on the matter in a hurry.—"Red Bluff Democrat."

If you've got a specialty that will commend itself to builders, make a contract for space and start right in and talk about that specialty. Dwell on its good points, point out its advantages over similar devices, set forth its dominant qualities. And keep right on, week after week talking about it. If you don't book orders we'll bet you a big red pipkin that there is either something better on the market or your specialty isn't worth a kopeck noway.

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

HIGH WATER MARK REACHED IN COST OF LABOR AND MATERIALS.

While the material and labor situation is still acute, there is every indication that it has about reached the high water mark, and that a recession may be expected in the near future, says the "Building Review" of New Orleans. There is no reason to doubt that an improvement in this direction will tend to release many building plans that have been held in abeyance. With the completion of Government cantonnments, the labor withdrawn from building centers will return to normal channels. The present propaganda to prevent further increase in food prices, the effort to minimize waste and other Governmental measures will certainly have a restraining effect on the further advance in the cost of labor and materials, and once the market is stabilized the prospective owners and tenants will adjust themselves to the reduced purchasing power of the unit dollar.

The situation just at this time is well illustrated by a prominent New Orleans architect, who had prepared plans for one of his clients to build on a \$14,000 plot of ground in the commercial district. There was in prospect a tenant for the property, who had agreed to pay a rental of \$500 per month; and if the building could have been erected for \$45,000 or \$50,000, as was anticipated, this would have represented 10 per cent. on the investment. But an estimate submitted by a leading contractor called for an expenditure of \$81,000, which was considerably more than the owner thought justified by the contemplated revenue from rental. The result is that the job is now hanging fire.

Notwithstanding this situation there has been sufficient construction work to maintain the balance of the building trades, particularly in the way of manufacturing establishments whose swift expansion has demanded increased equipment, and with the readjustment of capital and labor to the changed conditions which are natural concomitant of a country at war we may expect to enter a building era that will be unprecedented in the history of our nation.

Purpose produces three distinct things: Courage, Self-Reliance and Concentration. These qualities will equip any man for success. Courage is the disposition of heart that inspires him to attempt great things; Self-Reliance is the temper of mind that makes him believe he can accomplish great things; Concentration is the supremacy of will that causes him to achieve great things. When these three qualities are developed to their utmost and combined in equal proportion, we can call them by one name—genius. Genius is not a freak of natural endowment, but a product of conscious evolution.—Doctor Joseph H. Odell.

If your sales-talk is keyed to interest men who build it should occupy space every week in the "Guide," the only building magazine this side of Manhattan Island.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

School (Trade School) No. 2 (alts.), Howard and Girard avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Consists of interior alterations to basement, pine floors, electric lighting. Owners taking bids, due January 16th. Thos. C. Trafford, 1613 Sansom street; H. H. Burrell, 206 South Quince street; E. E. Hollenback, Inc., 1804 Brandywine street; J. H. Jordan, Thirty-first and Oxford streets, and Mitchell Bros., 2125 Race street, are figuring.

Schools (2) (alts.), Florence and Powers, Eighth and Catherine and Frankford avenue and Somerset streets, Philadelphia. Architect, J. Horace Cook, Nineteenth and Chestnut sts., Philadelphia. Owners, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Consists of interior alterations. Owners taking bids, due January 16th. H. H. Burrell, 206 South Quince street; J. H. Jordan, Thirty-first and Oxford streets, and Mitchell Bros., 2125 Race street, are figuring.

School (Heston), Fifty-fourth and Lansdowne avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut sts., Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick, concrete, steel and stone, 3 stories. Preliminary plans in progress. Too early for details.

Residence, Chestnut Hill, Philadelphia. Architects, Druckemiller & Williams, 1535 Chestnut street, Philadelphia. Owner's name withheld. Stone, 2½ stories, 45x52 feet, slate roof, vapor heating, hardwood floors, electric lighting, tile work. Architects taking bids. W. John Stevens, Inc., Wyncoote, Pa.; Wm. J. Grubler & Co., 219 East High street, Germantown; J. E. Walt, 204 East Willow Grove avenue, and R. W. Neff, 6610 Germantown avenue, Germantown; Speech & Sperry, Heed Building; F. L. Hoover & Son, 1023 Cherry street, and F. B. Davis, 240 North Sixteenth street, are figuring.

Boiler House, Sixty-third and Market sts., Philadelphia. Architect, J. M. Whitham, 607 Bullitt Building, Philadelphia. Owners, Shane Bros. & Wilson Co., on premises. Brick and concrete, 1 story, 35x40 feet, slag roof, concrete floors, electric lighting, rolled steel sash, fire doors. Architect taking bids, due as soon as possible. Wark-Yardley Co., 1737 Filbert street, are figuring, in addition to those reported.

Chief Gunners' Quarters, No. 2722, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, care of A. L. Parson, Acting Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Brick and frame, 2 stories, 36x30 feet, asbestos shingle roof, hot water heating, electric lighting, tile

work, maple floors, hollow tile, metal lath, waterproofing. Lowest bid submitted by Hyde & Baxter, Brooklyn, N. Y.

Apartment House, Belmont and Parkside avenues, Philadelphia. Architect, J. E. Fieldstein, Hale Building, Philadelphia. Owner, A. Sonnenfeld, 287 Cobb's Creek Boulevard, Philadelphia. Brick and stone, 3 stories, 47x54 feet, slag roof, hot water heating, electric lighting, pine floors. Plans in progress.

Service Building, 655 North Broad street, Philadelphia. Architect, J. Ethan Fieldstein, Hale Building, Philadelphia. Owners, Lovick & Waldow, 707 Walnut street, Philadelphia. Brick and terra cotta, 2 stories, 18x100 feet, slag roof, cement floors. Architect taking bids. E. J. Kreitzburg, 1345 Arch street, and D. Henwood, 1509 Wood street, are figuring.

Stores and Dwellings (5), 2709-11-13-15-17 Frankford avenue. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Consists of general interior and exterior alterations. Brick, 3 stories, metal bulks. Plans in progress. Owner will take bids in about one week.

Store (alts.), Twelfth and Vine streets, Philadelphia. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owner, Wm. H. Sternthal, on premises. Brick and steel work, metal bulks, electric lighting, tile work, tile and maple floors, metal ceilings. Architects have received bids.

Store Building (alts.), Fifteenth and Filbert streets, Philadelphia, \$2,500. Architect, H. B. Weldon, 1604 Cherry street, Philadelphia. Owner, M. O'Brien, 19 North Juniper street, Philadelphia. Consists of interior alterations, plastering, mill work, electric lighting, terrazzo work. Plans in progress.

Factory, Twenty-first and Venango streets, Philadelphia. Architect, H. B. Weldon, 1604 Cherry street, Philadelphia. Owner, John M. Kennedy, 1001 Chestnut street, Philadelphia. Brick (slow burning), 1 story, 60x150 feet, slag roof, cement floors, fire doors, roof ventilators. Owner is taking bids.

Station (repairs), Carpenter street and Allen Lane, Chestnut Hill. Architect, Mainte-

ance of Way, Broad Street Station, Philadelphia. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Consists of renewal and repairs to roof. Owners taking bids, due January 21st. Charles C. Pace, Merion, Pa., is figuring.

School (alts.), Eighth and Wolf streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Consists of interior alterations, bookcases, cloak rooms, mill work, etc. Plans in progress. Owners will be ready for bids in about one week.

Residence, Chestnut Hill, Philadelphia. Architects, Druckemiller & Williams, 1535 Chestnut street, Philadelphia. Owners, Mauran, Dolman & Co., Liberty Building, Philadelphia. Stone, 2½ stories, 45x52 feet, slate roof, vapor heating, hardwood floors, electric lighting, tile work. Architects taking bids, due January 24th. In addition to those previously reported, Alfred James, Bala, Pa., is figuring.

Convenience Station, Twenty-ninth and Tasker streets, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Department of Public Work, Bureau of Public Property, Room 113, City Hall, Philadelphia. Brick, 1 story, slate roof, electric lighting. Plans in progress. Too early for details.

Bank and Office Building (alts.), 921-23-25 Chestnut street. Architects, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owners, Federal Reserve Bank, 408 Chestnut street, Philadelphia. Stone, plastering and mill work, parquet floors, oak and maple floors, tile and marble work, metal lath, bank fixtures, metal window guards, wire work.

Residences (2), 1325-27 East Montgomery avenue, Philadelphia. Architect, private plans. Owner's name withheld. Brick, 2 stories, 16x52 feet, slag roof, stone foundations, hot water heating, combination lighting, tile and marble work, hardwood floors, metal lath. Philip Hainbach Cont. Co., Twenty-sixth and Thompson streets, are taking sub-bids, due January 16th.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Office Building (interior alts.), 925 Chestnut street, Philadelphia. Architects, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owners, Federal Reserve Bank, 408 Chestnut

street, Philadelphia. Consists of general interior alterations, stone, plastering and mill work, parquet floors, oak and maple floors, tile and marble work, metal lath, bank fix-

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tures, metal window guards, wire work. Contract awarded to Doyle & Co., 15519 Sansom street, Philadelphia.

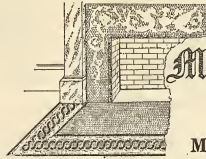
Store (alt.), Ninth and Walnut streets, Philadelphia, \$1,200. Architect, L. E. Denslow, 44 West Eighteenth street, New York City. Owners, United Cigar Stores Co., 44 West Eighteenth street, New York City. Interior alterations, plastering and decorating, electric work, tile and marble work, metal bulks, tile floors. Contract awarded to Smith-Hardiean Co., 1006 Cherry street, Philadelphia.

Car Repair Shop, Thirty-sixth and Jackson streets, Philadelphia, \$30,000. Architect, private plans. Owners, Union Tank Line Co., Oil City, Pa. Lessees, Atlantic Refining Co., 3144 Passunk avenue, Philadelphia. Iron, 1 story, 88x150 feet, asbestos roof, cement floor, rolled steel sash and skylights, fire doors (heating and lighting reserved). Contract awarded to Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia.

Storage Shed, Milnor street, Tacony, Philadelphia, \$70,000. Architect, private plans. Owners, Henry Disstons Sons Co., Tacony, Philadelphia. Frame, 1 story, 53x131 feet, slag roof. Contract awarded to H. E. Baton, 1713 Sansom street, Philadelphia.

Residences (3), Leverington and Smick streets, Philadelphia, \$7,400. Architect, private plans. Owner, Martin H. Keller, Jr., 326 Dupont street, Philadelphia. Stone and brick, 2 stories, 14x43 feet, slag roof, stone foundations, hot air heating, combination lighting, hardwood floors. Contract awarded to Wm. E. Keller, Green Lane and Mitchell street.

Apartment (alt. and add.) and Garages (4), Thirty-sixth and Povelton avenue, \$13,000. Architect, E. Allen Wilson, 1208 Chestnut st., Philadelphia. Owners, Winchell & Ashby, Seventeenth and Sansom streets, Philadelphia. Brick and stucco, 3 story addition, 13x15 feet, slag roof, hot water heating, combination lighting, tile and marble work, parquet floors, cement floors, stone foundations, iron stairs; garages, 1 story, 12x20 feet, brick. Contract awarded to Le Roy K. Smith, Forty-



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Elevated Stations (4), Frankford Elevated, Philadelphia, \$113,140. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, concrete and steel, 2 stories, 48x32 feet, and 3 stories, 64x30 feet, slag and tile roof, cement floors, electric lighting, tile, marble and terrazzo work, rolled steel sash, iron stairs, ornamental iron work, hollow tile, metal lath, safety treads, roof ventilators, metal ceilings, wire work. Contract awarded to Mitchell Bros., 2125 Race street, Philadelphia.

Pier (interior completion), No. 78, South Wharves, Philadelphia. Architect, private plans. Owners, City of Philadelphia, Department of Wharves, Docks and Ferries, George S. Webster, Director, Bourse Building, Philadelphia. Consists of interior finishing, concrete floors, elevator and general equipment, electric lighting. Contract awarded to Snare & Triest, 40 South Wharves, Philadelphia.

Apartment House (alts.), Nineteenth and Venango streets, Philadelphia, \$3,150. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Samuel Englander, Crozer Building, Philadelphia. Consists of general interior alterations, hardwood floors, tile work, marble work, electric lighting, heating extension. Contract awarded to Specht & Sperry, Heed Building, Philadelphia.

Warehouses (4), Delaware River and McKean street, and (3) Twentieth and Oregon avenue, Philadelphia, \$3,750,000. Architect, private plans. Owners, U. S. Government, care of Major E. B. Morden, Q. M., 504 Pennsylvania Building, Philadelphia. Brick, concrete, wood and tile, 1 story, (4) 160x500 and (3) 160x1200 feet, composition roof, electric lighting. Contract awarded to Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia.

Factory and Machine Shop (alts.), Tioga

and Tulip streets, \$6,200. Architect, private plans. Owners, F. A. Ashman & Son, on premises. Consists of interior alterations, mill work. Contract awarded to Wm. J. Grehler & Co., 219 East High street.

Machine Shop (add.), Church and Lackawanna streets, \$10,000. Architect, private plans. Owner, C. V. Roberts, Sixth and Darby streets, Philadelphia. Brick, 1 story, 48x90 feet and 35x76 feet, slag roof, cement floors, fire doors (heating and lighting reserved). Owner is building.

Boiler House, Fifty-second and Gray's avenue, Philadelphia, \$8,000. Architect, private plans. Owners, Tioga Steel and Iron Co., on premises. Steel and corrugated iron, 1 story, 50x50 feet, slag roof, concrete floors, electric lighting, fire doors. Contract awarded to Crowell Lundoff & Little Co., Fifty-second and Gray's avenue, Philadelphia.

Factory, Seventeenth and Wood streets, Philadelphia, \$5,000. Architect, private plans. Owners, R. M. Green Co., 1413 Vine street, Philadelphia. Consists of fire repairs, mill work, slag roof. Contract awarded to John Welsh, 138 North Seventeenth street, Philadelphia.

Oil House (alt. and add.), Nos. 5788-5787, Frankford Arsenal, \$12,545. Const. architect, Edwin J. Benter, Frankford Arsenal. Owners, U. S. Government, care of Col. Geo. Montgomery, Frankford Arsenal. Concrete and brick, 1 story, 32x18 feet, slate roof, rolled steel sash, fire doors. Contract awarded to W. W. Anstine & Co., 1218 Filbert street, Philadelphia.

Special Ammunition Building, Frankford Arsenal, Philadelphia, \$15,700. Architect, private plans. Owners, U. S. Government, care of Edwin J. Benter, Frankford Arsenal, Philadelphia. Frame, 1 story, 23x200 feet, composition roof, roof ventilators, electric lighting, heating extension. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, Phila-

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PENNSYLVANIA Construction News

Roof Over Shipping Platform, 2626 Gray's Ferry Road, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Quartermaster's Department, Schuylkill Arsenal. Brick, iron and steel, 265x8 feet, slag roof. Low bids submitted by: Albert Zellfelder, 151 South Broad street, \$2,095; Lam Building Co., 1001 Wood street, \$2,383; Wills-Ludwick Co., 34 South Seventeenth street, \$2,390.

Storage Building, Middletown, Pa., \$1,000,000. Architect, private plans. Owners, U. S. Government, Ordnance Department, care of General Wheeler, Washington, D. C. Details not decided. Plans in progress.

Nurses' Home, Phillipsburg, Center County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Phillipsburg Hospital, Phillipsburg, Center County, Pa. Brick, 2½ stories, 30x60 feet, slag roof, pine floors. Plans in progress.

Cottages (2), Nos. 2 and 3, Laurelton, Union County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Pennsylvania Village for Feeble Minded Women, Laurelton, Union County, Pa. Stone and brick, 2½ stories and basement, 77x53 feet and 100x84 feet, slag and slate roof, composition and pine floors, stone foundations, hot water heating, electric lighting, ornamental iron work. Architect taking bids, due February 4th. Hogg Const. Co., 1634 Sanson street, Edw. Fay & Son, 2 South Mole street, Philadelphia; F. H. Kaiser & Co., Pottstown, Pa., and Albert Beyer, Northumberland, Pa., are figuring.

Residence and Stable (alt. and add.), Ashbourne Road, Elkins Park. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner's name withheld. Hollow tile and stone, 2½ stories, 50x30 feet, wing 28x26 feet. Stable, 2 stories, stone foundations, slate roof, hardwood and cement floors, hot water heating, electric lighting, tile and marble work. Plans in progress. Architect will be ready for bids in about three weeks.

Residence (alts.), Frazer, Pa. Architects,

Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owner, Thos. L. Fansler, Bullitt Building, Philadelphia. Stone, 2½ stories, shingle roof, plumbing, electric lighting and general alterations. Architects have received bids.

Office Building, Marcus Hook, Pa. Architect, W. G. Eckles, New Castle, Pa. Owners, Sun Oil Co., care of Mr. Courtney, Marcus Hook, Pa. Brick and concrete, 2 stories. Preliminary plans in progress.

Residence (alt. and add.), Womelsdorf, Pa. Architect, C. J. Young, 520 Washington st., Reading, Pa. Owner, L. D. Smith, Womelsdorf, Pa. Brick, 3 stories, 20x100 feet, tin roof, yellow pine floors, hot water heating, tile work. Plans about completed. Owner will sub-let all contracts.

Schools (2), Rosedale and Hyde Park, Pa. Architect, Wayne M. High, 11 North Fifth street, Reading, Pa. Owners, Muhlenberg Township School Board, Berks County, Pa. Brick, 2 stories, electric lighting, slag roofs. Owners have received bids.

Stable (alt. and add.) (10 box stalls), Meadowbrook Farm, Pa. Architects, Wilson Eyre & Mellvaine, 1003 Spruce street, Philadelphia. Owner, Edw. C. Marshall, Rydal, Pa. Stucco, 1 story, 120x16 feet, slate roof, stone foundations, electric lighting, hollow tile. Architects taking bids. R. C. Ballinger & Co., 218 North Thirteenth street, and Specht & Sperry, Head Building, Philadelphia, are figuring.

Home (add. and alt.), Wilkes-Barre, Pa. Architect, Clark W. Evans, Coal Exchange Building, Wilkes-Barre, Pa. Owner, Sutton Estate, care of architect. Brick and stucco, 3 stories and basement, steam heating, electric lighting, tile and marble work, elevators. Preliminary plans in progress.

Tollet Rooms (2) (add.), Wilkes-Barre, Pa. Architects, McCormick & French, Dime Bank Building, Wilkes-Barre, Pa. Owners, Vulcan Iron Works, care of Mr. Jackson, Wilkes-Barre, Pa. Brick, 1 story, 20x28 feet, slate roof, concrete floors, tile and marble work, electric lighting. Owner taking bids. Walborn

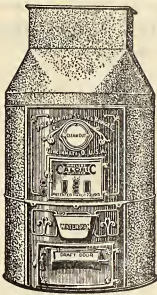
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& Barney, Wilkes-Barre, Pa., are figuring.

Store Building, East Market street, Wilkes-Barre, Pa. Architect, Geo. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. K. Weitzenkorn, Wilkes-Barre, Pa. Brick, 3 stories, 31x65 feet, slag roof, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal skylights, iron stairs, pine floors, metal lath, roof ventilators, metal ceilings, dampproofing. Plans in progress.

Residence (alt.), South River street, Wilkes-Barre, Pa. Architect, Geo. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, Frank McCormick, Wilkes-Barre, Pa. Brick, 3 stories, 36x42 feet, steam heating, electric lighting, tile work, hardwood floors. Plans in progress.

Store (alts.), South Main street, Wilkes-Barre, Pa., \$6,000. Architect, Geo. Schroeder, Wilkes-Barre, Pa. Owners, Blum Bros., South Main street, Wilkes-Barre, Pa. Consists of general interior and exterior alterations, 1 story, tile work, metal bulks. Architect ready for bids.

Residence (alt. and add.) and Farmers' House and Water System, Trooper, Pa. Architects, Mills and Van Kirk, Harrison Building, Philadelphia. Owner, A. J. Gioja, Trooper, Pa. Brick and stucco, 2½ stories, 18x20 feet, 1 story, 21x21 feet, slate roof, steam heating, electric lighting, tile and marble work, pine floors. Owner taking bids. Charles Alpin, Harrison Building, Philadelphia, is figuring.

Residence (alts.), Terwood Road and Washington Lane, Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owner's name withheld. Stone, 1 story, consists of general interior alterations necessary to change school into residence. Plans in progress.

Residence (alts.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owner, Huntingdon Valley Farms Co., Rydal, Pa. Stone, 2 stories, general interior alterations, steam heating, electric lighting. Architect taking bids. E. D. Lever, Jr., Abington, Pa.; Henry Specht, Jr., Willow Grove, Pa., and W. John Stevens, Inc., Wyncoete, Pa., are figuring.

Garage, Scranton, Pa. Architect, J. J. Howley, Scranton, Pa. Owner's name withheld. Brick, 2 stories, 40x60 feet, slag roof, steam heating, electric lighting, concrete floors.

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It's the Long Fire Travel in the Burnham Cosy Comfort Boiler That Makes the Short Coal Bill

IF you can keep the hot gases and smoke travelling back and forth inside a boiler long enough to extract the bulk of their heat, and still not make the draft sluggish, it's plain enough that less heat will go up chimney and more heat go into your radiators.

That back and forth action is what we call fire travel. It's this long fire travel in the BURNHAM Cosy Comfort Boilers that has a lot to do with making their short coal bills.

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Plans completed. Architect taking approximate bids.

County Court House (alts.), Honesdale, Pa. Architects, Duckworth Bros., Coal Exchange Building, Scranton, Pa. Owners, Wayne County, Department of Public Safety Building, Honesdale, Pa. Brick, 2 stories, 140x120 feet, general interior alterations, lighting fixtures and electric lighting. Plans in progress.

Orphanage, Nanticoke, Pa. Architect, J. Percival Morris, Burr Building, Scranton, Pa. Owners, St. Stanislaus Orphanage, care of architect. Hollow tile and stucco, 2 stories and basement, 130x120 feet, tile roof, steam heating, electric lighting, tile work, hardwood and composition floors, hollow tile, metal lath, fire towers, hollow metal skylights, safety treads, iron stairs. Preliminary plans completed.

PENNSYLVANIA

Contracts Awarded

Machine Shop, Harrisburg, Pa., \$100,000. Architect, private plans. Owners, Harrisburg Pipe and Pipe Bending Co., Harrisburg, Pa. Brick, concrete, steel and glass, 1 story, 420x100 feet, composition roof, concrete floors, rolled steel sash and skylights (heating, lighting, plumbing reserved). Contract awarded to the Austin Co., Cleveland, Ohio.

Administration Building (alts.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, Huntingdon Valley Farms Co., Rydal, Pa. Stone, 2 stories, general interior alterations, steam heating, electric lighting. Contract awarded to Howard S. Amey, Ambler, Pa.

Store Building (alt. and add.), 31 South Main street, Wilkes-Barre, Pa. Architects, Knapp & Bosworth, Wilkes-Barre, Pa. Owner, Joseph J. Herwitz Estate, Wilkes-Barre, Pa. Brick, 3 stories, 20x132 feet, slag roof, pine and parquet floors (steam heating, plumbing, electric work and tile work reserved), marble work, metal bulks. Contract awarded to Wm. J. Kear, Wilkes-Barre, Pa.

Blacksmith Shop, State street, Wilkes-Barre, Pa., \$5,800. Architect, George F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, Peter Frey, State street, Wilkes-Barre, Pa. Brick, 1 story, 40x80 feet,

asbestos roof, steam heating, electric lighting, plank floors. Contract awarded to W. J. Smith, South Main street, Wilkes-Barre, Pa.

Domestic Science Building, Richmond Hill, Scranton, Pa. Architect, Fred Nelson, Connell Building, Scranton, Pa. Owners, Richmond John School, on premises. Brick, 3 stories, 160x140 feet, slate roof, composition floors (steam heating and electric lighting and plumbing reserved), rolled steel sash, fire doors, fire escapes, hollow tile, metal lath, metal weather strips, waterproofing. Contract for carpentry awarded to Washburn & Williams, Scranton, Pa., and masonry to Freda & Garlueci, Scranton, Pa.

Factory (add.), Kingston, Pa. Architects, Sturdevant & Poggi, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Adder Machine Co., Kingston, Pa. Brick, 1 story, 46x52 feet, slag roof, steam heating, electric lighting, concrete floors. Contract awarded to Curtis & Co., Wilkes-Barre, Pa.

Manufacturing Buildings (5), Scranton, Pa. Architect, private plans. Owners, Helios Manufacturing Co., Scranton, Pa. Brick, steel and concrete, 1 story, 100x100 feet, slag roof, concrete floors, electric lighting. Contract awarded to Ludwig Stipp, Union Bank Building, Scranton, Pa.

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New Jersey Construction News

State Prison (add.), Trenton, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State of New Jersey, State Board of Prison Inspectors, Trenton, N. J. Stone, 2 stories, 140x40 feet, concrete floors, steam heating, electric lighting. Plans completed. Owners read for bids.

Hospital, Trenton, N. J. Architect, W. A. Kleeman, Trenton, N. J. Owners, City of Trenton, Dept. of Public Property, care of Mayor Donnelly, City Hall, Trenton, N. J. Brick, 1 and 2 stories, 300x26 feet, slate roof, steam heating, electric lighting, tile and marble work, concrete floors, hollow tile, metal lath, elevators, safety treads, iron stairs. Plans in progress.

School Building, Glassboro, N. J., \$775,000. Architects, Moffett & Stewart, Inc., 30 North Third st., Camden, N. J. Owners, Board of Education, Glassboro Township, N. J. Brick, stone and reinforced concrete, 2½ stories, 70 x146 feet, slag roof (steam heating, electric lighting, plumbing and furniture reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamein doors, dampproofing, ornamental iron work. Architects taking bids, due January 18th at noon. (Note change.)

Yard Office, Delaware avenue and Cooper street, Camden, N. J. Architect, Joshua C. Jefferis, 1001 Chestnut street, Philadelphia. Owners, Victor Talking Machine Co., Camden, N. J. Brick, 1 story, 42x32 feet, slag roof, cement and pine floors, rolled steel and hollow metal sash, hollow metal doors, dampproofing (plumbing, heating and lighting reserved). Contract awarded to J. W. Draper, 525 Market street, Camden, N. J.

Forge Shop, Plainfield, N. J. Architects, Harris & Richards, Drexel Building, Philadelphia. Owners, Niles, Cement, Pond Co., 111 Broadway, New York City. Brick and steel, reinforced concrete foundations, 1 story, 50 feet high, 60x200 feet, composition roof, wood block and cement floors, rolled steel sash, steel doors, rolled steel skylights, roof venti-

lators, electric lighting. Contract awarded to Henry E. Baton, 1715 Sansom street, Philadelphia.

Shelter Building, Camden, N. J., \$23,000. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick, steel and glass, 1 story, 300x35 feet, composition roof, cement floors, rolled steel sash and skylights, electric lighting. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

Office and Drawing Room (add.), Camden, N. J., \$15,000. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick and steel, 1 story and basement, 34x41 feet, slag roof, pine floors, steam heating, electric lighting. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

Bank (fire repairs), Hopewell, N. J. Architect, W. W. Slack, St. Regis Building, Trenton, N. J. Owners, First National Bank, Hopewell, N. J. Brick, 2 stories, 74x48 feet. Contract awarded to Sutphen Bros., Hopewell, N. J.

Miscellaneous Construction News

Rest Room and Toilet Building, Wilmington, Del. Architects, Brown & Whiteside, Dupont Building, Wilmington, Del. Owners, Wilmington Mills, Wilmington, Del. Brick, 1

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Storage Building, Dyote and Richmond sts., \$1,600. Wm. Cramp & Sons Co. (O and C), on premises. Iron on iron, 1 story, 61x36 feet; iron on iron, 1 story, 32x58 feet.

Dwellings (2), Harmon and Ridge avenue, \$7,000. Keller Bros. (O), Green lane and Mitchell street. W. E. Keller (O), Green lane and Mitchell street. Stone, brick and frame,

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1622 Real Estate Trust Co. Building

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PHILADELPHIA

story, 40x15 feet, slag roof, cement floors, tile and marble work (heating and lighting reserved). Architect taking bids, due as soon as possible. H. D. Haddock & Co., and A. S. Reed & Bro., both of Wilmington, Del., are figuring.

Bungalow, Gragmere, Wilmington, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, David Masters, 2001 Boulevard, Wilmington, Del. Brick and hollow tile, 1½ stories, 25x40 feet, shingle roof, hardwood floors, electric lighting, heating undecided. Plans being redrawn.

Colonial Residence, near New York City. Architect, J. H. Ravey, Coal Exchange Building, Scranton, Pa. Owner's name withheld. Clapboard and shingle, 2 stories, 24x40 feet, shingle roof, steam heating, electric lighting, tile work, hardwood floors. Plans in progress.

Proposals

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 2, 1918.—Sealed proposals will be opened in office at 3 p. m., February 6, 1918, for the extension, remodeling, etc., of the United States post office (old) at Pittsburgh, Pa. Drawings and specifications may be obtained from the custodian at Pittsburgh, Pa., or at this office, in the discretion of the Supervising Architect.

2 and 3 stories, 16x21 feet, slate roof, hot water heating.

Car Repair Shop, Thirty-sixth and Jackson streets, \$30,000. Union Tank Line Co. (O), Oil City, Pa. A. R. Co. (O), 3144 Passyunk avenue, Philadelphia. Iron on iron, 1 story, 88x150 feet, asbestos roofing, skylights.

Dwellings (3), Leverington and Smick sts.,

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PHILADELPHIA AS A BUILDING CENTER

A Classified and Tabulated Statistical Review of Structural Architectural Activities During 1917

Number of New Buildings Erected from January 1st to December 31st, 1917.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Operations.	Total	Estimated Cost.
Amusement, Places of.....	..	..	1	..	1	..	..	..	1	..	..	..	1	1	\$280,000
Banks	..	..	..	..	..	..	..	..	..	..	..	..	..	3	\$23,000
Club Houses	..	..	..	..	1	1	1	..	..	1	..	..	..	6	\$13,950
Churches	1	..	1	1	2	3	1	..	..	3	..	..	..	12	\$40,000
Dwellings, one-story	140	343	454	580	306	108	60	127	36	132	52	9	2386	6,323,020	
“ two-story	26	23	50	59	7	54	10	19	11	36	17	..	39	1,935,990	
“ three-story	4	1	3	11	2	3	6	3	1	1	1	..	10	107,345	
Engine and Boiler Houses.....	42	77	80	85	95	89	50	59	62	107	58	27	833	1,296,310	
Garages	..	1	..	..	..	..	..	..	..	..	1	..	3	5,390	
Halls	..	..	..	..	1	1	..	..	..	..	..	..	1	140,000	
Hospitals	..	..	..	..	..	..	..	..	..	..	..	..	..	22,000	
Laundries	..	..	..	..	1	..	..	..	..	..	..	..	..	1	2,000
Libraries	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2,695,000
Manufactories	9	6	5	13	10	9	5	2	8	6	4	5	82	5,131,485	
Municipal Buildings	..	..	..	6	16	12	10	28	10	10	16	12	160	1,750,000	
Miscellaneous Buildings	9	9	11	17	16	12	2	6	3	2	2	..	41	244,483	
Miscellaneous Buildings	..	..	8	7	3	2	2	..	..	..	..	..	..	23,000	
Office Buildings	3	..	..	..	..	..	..	..	..	..	..	..	..	1	23,000
Parish Buildings	1	..	1	1	2	..	..	..	1	1	..	2	8	505,100	
Power Houses	..	..	1	1	..	1	..	..	1	1	..	..	..	2	145,000
Schools	..	..	..	..	..	..	..	..	..	..	..	..	..	5	14,000
Stables	..	..	..	1	..	1	1	..	1	..	..	..	..	6	176,200
Stores	2	6	2	1	1	2	1	2	3	2	1	4	26	401,525	
Tenement Houses	1	1	..	3	5	2	2	1	1	..	1	1	5	2,217,000	
Warehouses	5	2	12	8	4	3	3	3	6	4	5	2	34	687,900	
Workshops	5	7	..	..	..	..	..	..	..	..	..	..	62	323,300	
Total New Buildings	250	477	639	796	459	293	157	248	170	326	161	65	4041	\$95,540,450	
Additions	67	77	124	121	138	109	106	109	121	120	74	20	1137	\$20,780	
Alterations and Repairs	174	187	253	260	215	245	210	197	183	183	133	100	2387	\$2,443,190	
Grand Total													7555	\$33,050,230	
Refrigerators													56	40,720	
Heaters													165	108,095	
Miscellaneous Work													1187	797,375	
Signs													64	20,070	
Total work of all kinds													8977	\$34,016,480	

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N. B.—The wards omitted from the following tables are eliminated in order to conserve space, no permits having been reported therefrom during the year.

TWO-STORY DWELLINGS—Including Two-story Stores and Dwellings

Wards	1	4	15	18	21	22	23	25	26	32	33	34	35	38	39	40	41	42	43	44	45	46	48	Totals
Jan.	1				53					19				3		2		61	1					140
Feb.					83	2					5					38		61				3	9	141
March			1			6	2			46	1			20	104	49		186	8	11	11			454
April	1			14		9				33		41	6			148	6	302			2	18		580
May				8		7	1		50					7		21	49	30	100	32	1			306
June		1	2	3	1				27			1		2	3		8		5	16			10	26
July	6			8					34															60
Aug.									57							12		11		43				127
Sept.				18	1	3								7			4		22				1	56
Oct.					9	36	9					27	23	6	1		22		19					152
Nov.					4	1								1			1		26			1	18	52
Dec.					3									6										9
Totals	7	1	1	2	64	187	84	2	168	33	92	71	53	24	125	332	36	833	58	12	19	65	167	2386

THREE-STORY DWELLINGS—Including Three-story Stores and Dwellings

Wards	2	3	4	10	18	21	22	23	26	27	34	35	38	39	40	42	46	Totals
Jan.			1					24			1							26
Feb.			1						1		1						3	23
March	1		1	1			16				23			1	2	3		50
April	1		1			2	4				2	8	1			12	28	59
May						3	3				1							7
June					1		14				1	27					1	54
July	2		1			4	2					1						10
Aug.						6	1					2				1		30
Sept.		1				2						1						11
Oct.						2	25				1	2						30
Nov.							5				12							17
Dec.																		1
Totals	4	1	5	1	1	11	77	50	1	1	68	14	1	1	2	20	39	297

\$7,400. Martin H. Keller, Jr. (O), 326 Dupont street. William E. Keller (C), Green lane and Mitchell street. Stone and brick, 2 stories, 14x43 feet, slag roof, hot air heating. Storage Shed, Milnor, Tacony, \$7,000. Henry Disstons Sons Co. (O), Tacony, Pa. Henry E.

Baton (C), 1713 Sansom street. Frame, 1 story, 53x131 feet. Open Shed, 1105 Frankford avenue, \$1,00. Otis Elevator Co. (O), on premises. Smith Hardican (Cs, 1606 Cherry street. Frame, 23 x90 feet, 1 story.

Alterations and Additions

Dwelling, Ninth and South streets, \$1,500. M. N. Newton (O), Eighth and Chestnut sts. Royer, Atkinson (C), Builders' Exchange. New partitions and plumbing. Office Building, 1700 Walnut street, \$700. Penn Co. (O), 5317 Chestnut street. A. Mac-Tavish (C), 1505 Pine street. Alterations. Stable and Garage, 238 Queen street, \$1,300. D. L. Ward Co. (O), 28 South Sixth street. Smith Hardican (C), 1604 Cherry street. Brick work and alterations.

Store, Ninth and Walnut street, \$1,200. United Cigar Co. (O), New York City. Smith Hardican (C), 1606 Cherry street. Interior alterations and new bulk. Dwelling, 202 Richmond street, \$300. F. F. Eltonhead (O), Wheat Sheaf lane and Cedar street. William E. Stone (C), 2069 E. Dauphin street. Fire damage. Garage, 1929 to 39 North Franklin street, \$2,000. Chas. J. Schneider (O), 1930 North Seventh st. Harry Gill, Jr. (C), 2515 Ger-

mantown avenue. Steam heating plant.

Store, 2822-24 Germantown avenue, \$1,000. John H. Gertz (O), 2822 Germantown avenue. H. P. Werner (C), 32455 Germantown avenue. Interior alterations, new heating system.

Dwelling, 2352 E. Dauphin street, \$600. John Palmer (O), Frank Achuff (C), 1600 North Front street. Brick, 2 stories, 14x12 feet, tin roof.

Garage, Upsal and Wissahickon avenue, \$1,000. John Seeds (O), 716 W. Upsal street. Chas. Johnson (C), 5701 Boyer street. Stone, 2 stories, 19x19 feet addition.

Dwelling, Sixty-first and Jefferson streets, \$400. Sam Englander (O), 1630 N. Franklin street. B. Kligerman (C), 326 North Second street. Interior alterations.

Coal Yard, Second and Reimel streets, \$6,000. Moyer Coal Co. (O), 931 Drexel Building. Geo. Kessler Cont. Co. (C), Drexel Building. Brick, 1 story office, 16x24 feet, slag roof, and coal trestle.

Factory, 52-54 North Sixth street, \$1,000. A. S. & H. P. Beck (O), 613 Chestnut street. Frank English (C), 1608 North Carlisle street. Alterations.

Dwelling and Garage, 538 E. Leverington avenue, \$4,500. Edgar S. Stafford (O), 4326 Manayunk avenue, Roxborough. Wm. H. Ed-dleman & Sons (C), 453 Green Lane, Roxborough. Stone, 1 story, 15x10 feet, heating plant, 1 bay window, 4x12 feet; stone, 1 story, 22x24 feet, tin roof.

Storage Building, 4127-29 Germantown avenue, \$600. John Forkubuski (O), on premises. A. Siemuski (C), 1634 Riffner street. Fire damage.

Dwelling, 3542 North Nineteenth street, \$3,150. S. Englander (O), Crozer Building. Specht & Sperry (C), Heed Building. Alterations to interior.

Office, Richmond and Buckius streets, \$500. H. A. Hitters & Sons (O and C), Huntingdon and Aramingo streets. Temporary building, 31x100 feet.

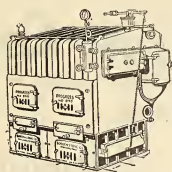
Store, 1632 Walnut street, \$3,000. Mr. Horner (O), Bryn Mawr. Chas. E. Clark (C), 116 N. Camas street. Fire damage repairs.

Machine Shop, Trenton and Erie avenues, \$2,000. Schlichter Jute Cordage Co. (O), on premises. Geo. Wardle (C), 5108 Duffield st. Alterations.

Store and Dwelling, 1913 Pine street, \$300. Albert Bauzenburger (O), on premises. Chas. H. S. Zetley (C), Pine and Quince sts. New flush bulk.

Store and Dwelling, 1644 South Seventh st., \$500. Chas. Weinberg (O), 419 Dowd Building. Max Nixon (C), 802 North Sixth street. New flush bulk.

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Liability Under Letters of Credit and Acceptance	627,981.91
Due from Banks	15,608,921.09
Cash and Reserve	8,683,611.97
Exchanges for Clearing House	4,161,952.24

\$73,944,176.53

LIABILITIES

Capital	\$1,000,000.00
Surplus	3,250,000.00
Undivided Profits	727,963.30
Letters of Credit and Acceptances	627,981.91
Rediscounts Federal Reserve Bank	4,168,276.59
Deposits	64,169,954.73

\$73,944,176.53

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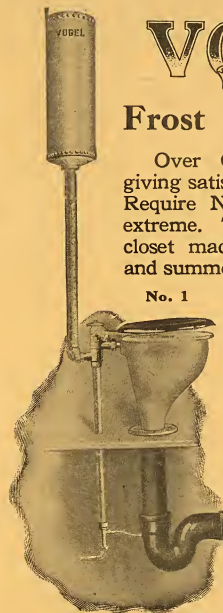
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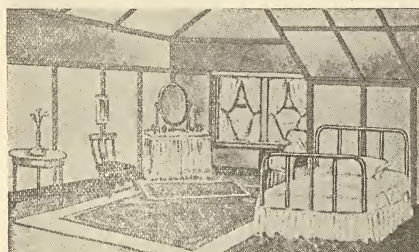
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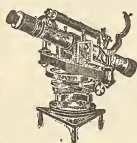
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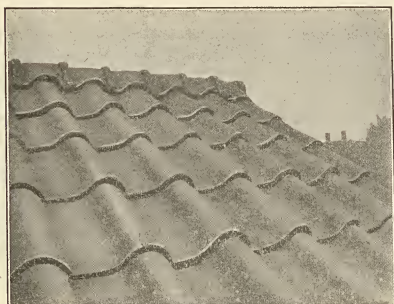
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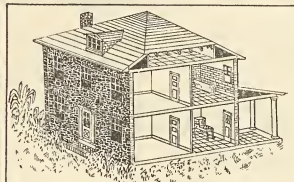


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Number 4

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January 23, 1918

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and Builders' Guide

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As The Editor Sees It



ON Thursday, January 10th, a committee composed of members of the Association of Building and Allied Industries, of New York City, went to Washington for the purpose of getting in closer touch with the attitude of the Government toward the building industry. Among those who made up the delegation were Elliott Smith, President of the Building Material Exchange; H. H. Murdock, of Jardine, Hill & Murdock, Architects; G. Osgood Andrews, representing the National Plate Glass Manufacturers' Association; Frank N. Quinby, of the Brooklyn Chapter of the American Institute of Architects; Allen E. Beals and E. A. MacDougall, President of the Queensboro Corporation.

The meeting had been set for Friday and appointments arranged with Senator William G. Calder, Walter E. Gifford, Director of the Council of National Defense and Otto M. Eidlitz, Chairman of the Housing Committee of the Council of National Defense.

What the committee was able to achieve as a result of the conference will not be known until after its official report has been presented to the Association of Building and Allied Industries upon whose initiative it made the trip. One of its principal objects, it is understood, was to ascertain definitely and in official channels just how far the government would be prepared to go in the matter of financing the erection of needed

housing accommodations for working men employed in industries of vital importance to the winning of the war. The city cannot help in building homes and the state is unable to help to any effectual degree. The Federal Government, however, under the constitution, is given the right of conducting war and it is the only government in our American scheme of affairs that has this power.

* * *

UNDER the pressure of military exigency the Federal Government can take a needed area of land, take possession of it, build upon it and make payment after the fact on some proper method of appraisal or with the help of the courts. It can do the actual work of building if it can be shown that as a measure of war necessity this action was justifiable.

The Federal Government has, also, the right to loan money to produce building.

The demand for homes to shelter the vast colonies of labor assembled at various points by large industries engaged in war work has reached a stage at which government aid is the one effective solution.

Great Britain has gone into the producing of working men's homes on a large scale as an offset to a condition similar to that facing us here and is financing the work under way with government funds. Whether our own government is prepared to emulate the

British example and, if so, to what extent and along what lines, is the information the committee that visited Washington was appointed to bring out.

A home building movement of large scope under Federal sanction and financed by the government would do much at this time to stimulate every branch of the building trades. Of existing industries the building industry has, perhaps, been hardest hit by the conditions arising out of America's entry into the war.

Quite aside from any consideration of the tremendous impetus such a movement would necessarily give to the work of war preparation there remains for it the additional justification that it would probably do more to bring building conditions back to normal standards than any other expedient human ingenuity would find it possible to suggest.

* * *

HOW material costs have jumped within the past two years is most convincingly shown in a statement on this subject printed in a recent number of the *Record and Guide* of New York City. Says this statement:

Conditions in the market for building materials and supplies during 1917 have been characterized by sudden and unusual changes. It the first place, production of many of the basic commodities has suffered considerable loss from the untoward circumstances of fuel scarcity, inability to secure raw materials,

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labor shortage and lack of adequate transportation. Production of certain fundamentals, such as brick and cement, although of fairly good volume during the first half of the year, have been substantially reduced as the year progressed. Only a slackening in the number of new building operations has prevented actual shortage of supplies, and in the case of certain commodities, such as window glass, stocks have become so far depleted that difficulty in filling orders has been experienced.

Accompanying the unusual conditions, prices of materials were most unstable up to within a short time ago. Of course, the most spectacular advance was that of structural steel, which sold for \$40.00 per ton on January 1, 1917, but rose to \$100.80 per ton by July 1. Naturally such levels could not be maintained for long, and the market broke to \$89.60 by September 1st. Then came price-fixing, which definitely located the level of \$67.20, at which new orders have since been placed. Because of the tremendous war demand for steel the market when allowed free play became more of an auction than anything else. Undoubtedly the steadying effect of price-regulation has exercised a beneficial influence upon all steel consuming industries. However, all kinds of steel are not subject to the heavy Government demand that has been felt for structural shapes and plates.

* * *

THE brick market during 1917 underwent two distinct movements. Starting in with quotations at the \$8.00 level, the price rose rapidly, finding a temporary resting place at the \$10.00 mark, a point not reached since the Summer of 1906. During April, May and June, quotations on common brick remained at or near this level, then, started on a downward trend. At the \$8.00 point, however, the declining tendency was checked, and prices have hovered about this mark up to last week, with occasional variations of 25 cents or 50 cents in either direction. Brick was taken out of the market at the \$9.00 level.

The lumber market was characterized by advancing prices during the past year. Although an apparent resting place has been found at current levels, there is uncertainty in the local trade as to how long this condition will exist. Undoubtedly transportation is the all-important factor in the lumber market, as has been the case throughout 1917. A temporary relief from the congested situation would enable sellers to replenish stocks, only to be followed by a tightening up in the car shortage with the result that supplies would again become depleted and stocks

badly broken. Naturally such uncertain conditions were reflected in lumber prices, which were often very erratic. A further cause of instability is found in the spasmodic nature of the demand, resulting from various requirements. Feeling is that nothing but firmness is in sight. Transportation conditions are so uncertain, and even with a bettered car supply the demand from miscellaneous sources is felt to be enough to prevent any surplus accumulation of lumber.

Window glass production for the 1917-1918 season will probably be only 50 per cent. of normal, owing to the difficulties which have been encountered. In the first place, the producing season has been curtailed by unfavorable circumstances, so that operation of the plants will continue only sixteen weeks instead of twenty-six as normally. Labor shortage, inability to secure coal and raw materials have reduced the normal production. Taking into account the fact, also, that Belgian and German glass no longer comes to this country because of the war, it is easy to see why there is danger of real shortage. Only an absence of active building demand has prevented even greater price advances.

* * *

ON another page of this number of the GUIDE will be found a schedule of changes in wages in various branches of the building trades as listed by the Building Trades Employers' Association. These changes cannot fail to be of interest as instancing one of the many items that have added measurably within the past two years to the cost of building.

* * *

AN article by John Taylor Boyd, Jr., in *The Architectural Record* on the late H. Langford Warren, founder and organizer of the School of Architecture of Harvard University, contains a chapter of some interest on the "French influence" so all-pervasive in the late nineties. The chapter runs:

Professor Warren's work at Harvard was in a sense a struggle. He began to establish his school when French influence—French influence so-called—was sweeping over the profession, spread by a stream of returning enthusiasts from Paris. That took place twenty years ago and the results are to be seen in the buildings of that time. The Paris missionaries would brook no compromise; they wanted America to adopt not only French teaching but French art-forms as well. Some practicing architects resisted the movement, among them Mr. McKim, already well on his career as the greatest architect of the English-speaking race, the greatest at any rate since Christopher

Wren; Mr. Platt in New York, some architects of houses in Philadelphia like Mr. Eyre and Mr. Day, and in Boston like Mr. Bigelow. The work of such men could be tolerated, for it was too important to be derided successfully, but the Paris faction thought it presumptuous for any school to teach anything but the style of the Beaux-Arts. This all seems trivial today, but the public hardly realizes that only fifteen years ago it required great courage to hold out for the principles that are commonplace now. We may be thankful that Professor Warren lived to see the vindication of many of his ideas. Think of it! In some quarters he was chided not only for appreciating Colonial architecture, but for teaching it in design problems.

* * *

FOR a time Professor Warren went almost too far in opposition to the French propaganda. He was not primarily a teacher of design, and in his anxiety to instill appreciation of fine taste in the students, he sometimes discouraged initiative and imagination in planning by insisting on conscientious care in details of motive and ornament. But as his opponents grew less fervent in their worship of French taste, Professor Warren became broader in his attitude toward the design policy of the Harvard school. At the same time the work of McKim and of the others noted above was beginning to tell. Almost suddenly the attitude of the architectural world shifted over. It was agreed that America should adopt the sound and inspiring methods of Parisian teaching, but that she must develop her own traditions of good taste in architecture. Then Professor Warren made a brilliant move. He succeeded in bringing to the United States Professor Armand Duesenne, one of the soundest teachers of the Ecole des Beaux-Arts in theory and one of the ablest in planning, whose mind works almost mathematically their solution of architectural problems.

* * *

HE was the first winner of the Grand Prix de Rome to come over to the United States to teach. Unfortunately, after two years here the war called him back to France. By this time the school had won the backing of some of the ablest members of the profession, and Professor Warren felt that even McKim himself would have come to Cambridge to teach if it had been more accessible from New York.

Professor Warren performed a further valuable work, though one not so well known. This was his teaching of the abstract theory of architecture as distinct both from history and design by

specific problems. His history was replete, in a vital way, with criticism and with illustrations of principles of architectural design, but he felt the need of a short series of lectures on the philosophy of beauty in architecture. Professor Warren had become impressed with the remarkable presentation of the principles of design in the arts formulated by Dr. Denman W. Ross in the Department of Fine Arts in Harvard College, whose brilliant analysis of the subject is only just being accepted.

THESE general principles of design in the decorative arts of Professor Warren applied specifically to architecture, with additional exposition of

the kind of beauty which is a function of utility in architecture. Or, in other words, architecture is a useful art, and in addition to the beauty that may lie in its forms, it may have a further beauty that comes from the expression artistically of use and of construction. These lectures were extraordinary for insight, sympathy and clarity. They are to be compared to the best French expositions of theory. Indeed, students who went to Paris for further study in architecture found that they were grounded in the same principles that the art-teaching there set forth, if allowance be only made for differences in individual personality and for the more imaginative French ideal.

Chicago, Ill., February 7 and 8, 1918. Headquarters will be at the Great Northern Hotel. An interesting program has been prepared and open discussions will be conducted upon a number of live topics.

C. F. Coleman has been elected president of the Worthington Pump & Machinery Corporation, New York. Mr. Coleman was vice-president. The office of president had been vacant since the reorganization of the corporation a year or so ago.

Leon Bloch, for some time in charge of the Pittsburgh territory for the Glauber Brass Manufacturing Co., of Cleveland, is now the manager of the New York office of this concern with headquarters in the Architects' Building, 101 Park avenue, that city.

John P. Butler, president of the contracting and building firm of John T. Brady & Company, died Tuesday, January 8th, at his home, 575 West 171st street, New York. He was 42 years of age and had been associated with the building trades all of his business life. Mr. Butler was a native of New York and was a member of the Catholic Club, Friendly Sons of St. Patrick, the Engineers' Club, Elks Club, Cooper Union Alumni and other fraternal and social organizations. He is survived by his widow.

The current number of "Architecture and Building" contains a splendidly conceived appreciation of the late Theodore Starrett from the pen of Mr. William Phillips Comstock, with whom Mr. Starrett was for many years associated as contributing editor. Philadelphians will probably recall Mr. Starrett most vividly as the builder of the new Wanamaker store, one of the finest structures of its type in the world.

With what spirit the New York building trades are taking up the movement to ascertain and remove the basic causes for the general depression in building may be judged by a glance at the names of those in attendance at a recent meeting called to advance that movement. Among those actively participating were: C. A. Jackson, of the New York Chapter, American Institute of Architects; E. A. MacDougall and A. F. Mathews, of the Chamber of Commerce of the Borough of Queens; Louis Gold, of the Brooklyn Board of Real Estate Brokers; J. M. Wakeman and Theodore Dwight, of the Society for Electrical Development; Richard O. Chittick and H. H. Murdock, of the Real Estate Board of New York; Frank H. Quinby, of the Brooklyn Chapter, American Institute of Architects; L. W. Harrington and E. J. Johnson, of the Credit Association of New York; Professor Ira H. Woolson, of the National Board of Fire Underwriters; S. Harby Plough and W. C. Bergen, of the Builders' Protective Association; Elliott H. Smith, C. J. Curtin and George A. Moltor, of the Building Material Exchange; Hugh Getty, Frank Conover and C. G. Norman, of the Building Trades Emp-

EDITORIAL NOTES

Government construction has assumed a dominating position in the local building situation, as has been the case all over the country. Aside from strictly military building work, there is a growing interest on the part of the authorities in the matter of proper housing for workmen. That there is a direct relation between proper housing of labor and efficiency in production of war supplies. This matter has already assumed national significance, and calls for quick and aggressive action on the part of all concerned.

American Concrete Institute will hold its annual meeting in Chicago, Ill., February 7 to 9, 1918. Secretary, H. B. Alvord, 27 School street, Boston, Mass.

Despite all obstacles to building, which have arisen either directly or indirectly from the new war conditions, the total value of work started in 1917 shows a good volume. Much of this good showing is due to the numerous projects launched in the first part of the year, before it was definitely known that the country would be plunged into war. But even under war conditions the strength of the industry has been proved. Naturally, building and construction has undergone readjustments just as all other business, in adapting itself to war.

Master House Painters and Decorators' Association of the State of New York will hold its annual convention at Syracuse, N. Y., January 22 to 24, 1918. Headquarters will be at the Onondaga Hotel.

During the last three weeks practically every business and industry in this city has been seriously affected by the unprecedented cold weather, but none to a greater extent than the building trades and those lines dependent upon them. Construction work has practically ceased, and will probably not be resumed until the weather moderates. There

is a considerable volume of new construction in sight, an uncertain lines are indicating a definite trend toward improvement; but with the combination of cold, delayed freight, lack of fuel and other factors that enter into the situation the majority of the proposed operations will be held in abeyance till spring.

American Road Builders' Association will hold its fifteenth annual convention in St. Louis, Mo., during the early part of February, 1918. Further details of this meeting will be available for a later issue.

Harris & Hall, landscape architects and engineers, have recently moved their offices from 250 Delaware avenue to 110 Franklin street, Buffalo, N. Y.

American Ceramic Society will hold its twentieth annual meeting at Indianapolis, Ind., February 11th to 13th. A number of vitally important matters concerning the future of this organization will be presented for consideration at this meeting.

Yale & Towne Mfg. Co., New York, has 190 of its men in the national service, headed by the president of the company, Major Walter C. Allen, who is now in France.

Babcock & Wilcox Co., Bayonne, N. J., manufacturer of water tube boilers, gave a bonus to its 2,700 employees at Christmas of 10 per cent. of their wages for the past six months.

Pennsylvania and Atlantic Seaboard Hardware Association and the New York State Retail Hardware Association will hold a joint annual convention and exhibition in New York City, February 12, 13, 14, 15, 1918. Headquarters at the Hotel Astor.

National Association of Sand & Gravel Producers will hold its annual convention in

players' Association; Francis N. Howland, of the Material Dealers' Association; Frederick C. Zobel and A. E. Fischer, of the New York Society of Architects; Wesley C. Bush, W. C. Williams and John McKeown, of the Mechanics' and Traders' Exchange; Charles Burns, of the Long Island Building Trades, and Benjamin Leavin, of the Bronx Chamber of Commerce.

The per capital circulation of money in the United States on January 1st was \$48.76, an of \$5.76 for the year. According to the Treasury Department, the general stock of money in the United States on January 1st amounted to \$6,256,198,271, an increase of \$1,244,152,754, compared with a year ago. The total of money in circulation on the first of the year was \$5,120,424,908, an increase of \$679,492,274 over January 1, 1917.

LATROBE'S DESIGNS FOR THE CATHEDRAL OF BALTIMORE

When Bishop John Carroll undertook to build a cathedral for the Catholic diocese of the United States the country afforded no model for such an edifice. The See of Baltimore, erected in 1789, coeval with the establishment of the federal constitution, was the first religious jurisdiction in America having a national scope. Pius VI wrote, in the Bull which created it and made Carroll bishop: "We commission the said bishop-elect to erect a church in the said city of Baltimore in the form of a Cathedral, inasmuch as the times and circumstances may allow." The national character and the ambitions of the church were in striking contrast with its actual conditions and means. St. Peter's Church in Baltimore, which became Carroll's pro-cathedral, was but an aggregation of small buildings of domestic character, dictated by the pre-Revolutionary laws against holding Catholic worship except in private houses. Poor as this building was, it was then by far the most elaborate Catholic house of worship in the United States, with the possible exception of St. Mary's in Philadelphia.

In the churches of the dominant Protestant sects also there was little which could furnish inspiration for the design of a cathedral. The Puritanism of the New England colonies had proudly renounced every appeal to the senses, and worshipped in halls of barn-like asceticism, such as the Old South in Boston.

The Anglican church of the day, itself strongly Protestant, had little elaborate ritual or diocesan coherence. Its best churches, the best of the colonial period—St. Philip's and St. Michael's in Charleston, Christ Church in Philadelphia, King's Chapel in Boston, and St. Paul's in New York—were modeled on the London parish churches of Gibbs. They had indeed a basilican nave, but no development of chancel or transepts, and nothing in their external aspect suggestive of more than a parochial significance. The nave with a single western tower had always been indissolubly associated in England with the parish church. Classical details and a portico did nothing to shake this association. The accepted Colonial scheme, taken over bodily from Protestantism, had to suffice for Buifnech's Church of the Holy Cross in Boston (1800-03), but would never do for a cathedral for the Catholicism of a whole nation.

Even foreign cathedrals, in reality, could

offer less direct inspiration than one might think. The great period of cathedral building had been the Middle Ages; the cathedrals of the mother countries were Gothic, a style little known to the Americans of 1800. St. Peter's and St. Paul's, the outstanding examples in Renaissance forms, were on such a vast scale as to preclude imitation, and they were already attacked by the adherents of classical purism. The classicists, however, had had no cathedrals to build. Their nearest approach to one was Soufflot's church of St. Genevieve, the composition of which well fitted it for a national Pantheon. In truth the building of cathedrals had stopped in the old cities of Europe, and the one now to be built on the frontier of Christianity and civilization presented a new problem.

To cope with the problem there was in Carroll, a man of energy and tact, having wide European observation and eagerness to secure the best professional advice available. An American of prominent family, he had studied and taught for twenty years in the Jesuit schools and colleges of Flanders, and had toured Europe, England, and Canada. His helpers, although loyal, were lacking in ideals and experience. Building committee and builders alike were unprepared for the task of erecting a building of the very character of which they had scarcely a conception. With the best intentions they could not succeed without finding an architect of skill and knowledge transcending the narrow experience and book-learning of the best post-Colonial designers.

Although much of the correspondence relating to the design of the building has been published as part of the "Cathedral Records," the designs themselves have hitherto escaped search. The collection of Mr. F. C. Latrobe, of Baltimore, however, proves to include many drawings of the cathedral quite equal in interest to the executed work. Of the seven successive designs which were prepared by his ancestor, the architect, he has drawings representing four, from which, and other evidences, the provisions of the intervening designs may also be deduced. It thus becomes possible for the first time to understand the

architectural history of the cathedral, and to appreciate more fully its extreme importance in the history of American architecture.

The first attempt to produce a design for the cathedral was apparently a volunteer one. Dr. William Thornton, who was a friend of the Carroll family, gave the Bishop a sketch, now, unfortunately, not to be found in the cathedral archives or in the various collections of Thornton drawings. This design, like all of Thornton's, did not fail to recognize the importance of the edifice; but it seems to have had difficulties, like Thornton's plan for the Capitol, arising from the author's lack of fundamental training in co-ordinating the details of a complex project. Bishop Carroll was evidently not wholly satisfied, for he had it submitted to Latrobe for an opinion. To us such a submission might seem contrary to the ethics of the profession, but as Latrobe was ignorant of the authorship of the design and made it a rule to charge nothing for any services to religious or educational bodies, it may be pardoned. The design called for some fifty-four Corinthian columns thirty feet high, with a "tower or dome" resting on certain of these without either piers or relieving arches. Latrobe's criticism, from which we obtain the meagre knowledge we have of it, was that it was too expensive, and incapable of erection in stone for constructive reasons.

Latrobe, who was now invited to submit a design, and who offered his services freely, was far better equipped to solve the difficult problem in hand. The professional pupil of the elder Cockerell and of Smeaton, and himself an architect who had been honored with offers of the highest posts in the gift of England and America, he had the artistic ideals and the practical experience of both hemispheres. He had, moreover, the gift of keen analysis of a program, which was here urgently required.

On April 16, 1805, he submitted two designs, "the one in Gothic, the other in Roman style." Both conformed in plan to a report by which Latrobe hoped to educate the building committee as to the requirements for a cathedral. In this he laid down as axiomatic a Latin cross form with side aisles and a large development of choir and transepts. Regarding the question of style he writes: "The veneration which the Gothic cathedrals generally excite by their peculiar style, by the associations belonging particularly to that style, and by the real grandeur and beauty which it possesses, has induced me to propose the Gothic style of building in the first design submitted to you. . . . I submit the choice to you entirely, having myself an equal desire to see the first or the second erected, my habits rather inclining me to

the latter, while my reasonings prefer the first."

A clear-cut choice of style, such as Latrobe offered, was itself a new thing on this side of the Atlantic. There had been, indeed, many crude survivals of traditional Gothic building in the Colonies during the seventeenth century and even in certain churches of the eighteenth century. When Trinity Church in New York, which was one of these, was first rebuilt after its destruction in the Revolution, a supposedly Gothic style had been retained, although "Improved by rules and proportions" after the manner of Batty Langley. Latrobe, however, brought for the first time a real knowledge of Gothic in its great period, which had been acquired by the pioneers of the Gothic revival. In England, the home of this movement, experiments in building with this style had been progressing for fifty years with increasing success, and results already by no means contemptible. There the principal Gothic designs had been for country seats, which Latrobe had emulated in his design for Sedgely near Philadelphia. No cathedral in revived Gothic forms had yet been attempted in England, and outside of England no Gothic church had yet been projected in modern times.

Latrobe's Gothic design for the Cathedral, although still lacking in the sympathetic understanding of detail which came first with Ruskin fifty years later, is not unacceptable judged even by present standards of knowledge. It had a clerestoried nave and aisles vaulted throughout in masonry, with grouped vaulting shafts carried to the ground, and vigorous wall buttresses. The difficulty produced at the crossing by the narrowness of the aisles, treated merely as passages, was overcome by a rhythmic bay motive carried into the choir and transepts. The west front of the nave was given a deep arched opening like one of the arches of Peterborough, with the aisle fronts carried up to the same height; the transepts had a shallower great arch, but with the silhouette of nave and aisles revealed. A low central lantern dominated and unified the exterior, which could not have failed to be very impressive, with its cliff-like walls and deep shadows.

The alternative "Roman" design is equally advanced in relation to the tendencies of the time. It is on the general scheme of the Pantheon in Paris, but is made even more severely classical by the substitution of a Roman saucer dome for the tall Renaissance dome of its prototype. The plan involves an ingenious avoidance of the weakness of Soufflot's, and that the angle piers are strengthened, and the ports a faux of Soufflot's dome are lacking. The narrow aisles which flank both nave and transept are carried through the piers diagonally, and the adjustment of the Latin cross within an essentially Greek cross

scheme is managed with great facility. The lunettes which light the interior are not masked as in the Pantheon or St. Paul's, but expressed on the exterior with a frankness which is characteristic of Latrobe's structural purism. The main cornice outside is placed at the height of the impost within, thus producing an attic.

Although Latrobe later expressed his preference for an order the full height of the building, which had distinguished Soufflot's design, he felt at first that he must adopt "the old and not very elegant idea of an attic" to decrease the scale and expense. Despite this concession to academic formulae the design is notable for its grandiose and monumental classical character. On either plan the building was sure to be noble and appropriate.—Fiske Kimball, in "The Architectural Record."

ONE WAY OF SECURING CONTRACTS.

A. Wiseman, an electrical contractor in California, was a hustler, and his work was a combination of good quality and reasonable prices. He had hundreds of competitors—or did when he decided to "label his work," but since then most of them have faded away (some of them, he writes, are now working for him), and what's the reason?

Well, he figured it out thus: Every contract he secures he puts a sign on to show the public that he is on the job; that it was only another structure he was wiring. One sign, plus good work and reasonable prices enabled him to land another, and to-day it is a foregone conclusion that if anyone is going to have electrical work done A. Wiseman will have a chance at it.

Now take this home to yourself—be A. Wiseman in your community. No matter whether you supply the brick, the lumber, the mantels, the glass, the millwork, the roof or the waterproofing of the cellar—no matter whether you are the architect, the contractor, the stairbuilder or plumber, tell the passerby that you are "on the job"—that is, if you are proud enough of your work—willing that it or the material you are selling should bear inspection. There is nothing more dignified or elegant than these 2x3 feet signs manufactured by the Independent Printing Companies of U. S. at Washington, D. C., and which sell for about 15c each. They are well made of flexible hemp fibre, better than cardboard, cloth or metal—not greasy, but absolutely weatherproof. A sample is obtainable upon request.

Independent Printing Companies of U. S.,
McLachlen Bank Building, Wash-
ington, D. C.

The man who is "going to do some advertising next year—maybe" gets his advertising in the end in the shape of an obituary.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently, "but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectively than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

Why not try it out?

The cost is not excessive.

Call Mr. L. S. DeLone.

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Store Building (int. alts.), 1033 Walnut st., Philadelphia. Architect, Frank V. Nickels, 4400 Manayunk avenue, Philadelphia. Owner, Wm. O'Brien, 1037 Walnut street, Philadelphia. Brick, 4 stories, slag roof, stone foundations, hot water heating, tile work, hollow metal skylights, ornamental iron work (heating, plumbing and lighting reserved). Owner is taking bids. E. J. Kreitzburg, 1345 Arch street; Stacy Reeves & Sons, 2011 Market street; Mr. Forbstein, 908 Walnut street, and Thomas J. Carberry, Heed Building, are figuring.

Special Ammunition Shop Building No. 2, No. 5941, Frankford Arsenal. Architect, private plans. Owners, U. S. Govt., care of Edwin J. Benter, Frankford Arsenal, Philadelphia. One story, 23x192 feet, cement and maple floors, roof ventilators. Owners have received bids.

Store Building, 655 N. Broad street, Philadelphia. Architect, J. Ethan Poldstein, 308 Penfield Building, Philadelphia. Owners, Levick & Wadlow, 707 Walnut street, Philadelphia. Brick, stone and terra cotta, stone foundations, 2 stories, 18x100 feet, slag roof, steam heating, electric lighting, tile work, hollow metal skylights, metal bulks, ornamental iron work, cement and pine floors, metal lath, metal ceilings. Architect taking bids, due as soon as possible. Ketcham & McQuade, 1029 Brown street, and A. Sonnenfeld, Eleventh and Wyoming avenue, are figuring, in addition to those previously reported.

Store Building (alts.), 1006-08 Market st., Philadelphia. Architects, Wm. Steele & Sons, Co., 30 S. Fifteenth street, Philadelphia. Owner, Samuel Snellenburg, Eleventh and Market streets, Philadelphia. Consists of general alterations, tile and marble work, hollow metal sash, flush bulks, tile and cement floors, metal lath, safety treads, metal ceilings, waterproofing. Owner taking bids, due January 23d. Metzger & Fisher, Otis Building; F. L. Hoover & Son, 1023 Cherry street; Smith-Hardican Co., 1606 Cherry street, and Sutton & Stephenson, 1317 Washington avenue; Lam Building Co., 1001 Wood street, and Thos. C. Trafford, 1613 Sansom street, are figuring.

Lodge and Stable (alts.), Wissinoming Park, Frankford, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, Dept. of Public Works, Geo. E. Datesman, Director, City Hall, Philadelphia. Brick, 1 story, tin roof, general alterations to buildings and grounds. Owners taking bids due January 25th at noon.

Cottages (2), Nos. 2 and 3, Laurelton, Union Co., Pa. Architect, Geo. S. Idell, 34 S. Sixteenth street, Philadelphia. Owners, Penna. Village for Feeble Minded Women, Laurelton, Pa. Stone and brick, 2½ stories and basement, 77x53 feet and 100x34 feet, slag and slate roof, composition and pine floors, stone foundations, hot water heating, electric lighting, ornamental iron work. Architect taking bids, due February 4th. Wark-Yardley Co.,

1737 Filbert street, Philadelphia, and W. D. Steinbach's Son, Lewistown, Pa., additional bidders.

Stores and Dwellings (5), 2709-11-13-15-17 Frankford avenue. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owners, Chas. F. Eggleston, Bailey Building, Philadelphia. Consists of general interior and exterior alterations, brick, 3 stories, hot air heating, electric lighting, tile work, yellow pine floors, cement work, imitation brownstone store fixtures, flush bulks, metal ceilings. Owner is ready for bids.

Office Building, Philadelphia. Architect, Ernest H. Yardley, Presser Building, Philadelphia. Owner, name withheld. Brick, limestone, terra cotta, fireproof, 25 stories, 60x95 feet, slag roof, steam heating, electric lighting, cement floors hollow tile. Sketches completed. Plans in progress.

Residence, Conshohocken, Pa., \$40,000. Architect, Ernest H. Yardley, Presser Building, Philadelphia. Owner, name withheld. Stone, 2½ stories, 65x45 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Plans in progress. Will take bids in about one month.

Industrial Buildings, Philadelphia. Architect, Ernest H. Yardley, Presser Building, Philadelphia. Owner, name withheld. Concrete and steel, fireproof, 12 stories, 274x175 feet, slag roof, steam heating, electric lighting, tile work, rolled steel sash, hollow metal sash, fire doors, pine and cement floors. Plans in progress.

Store and Apartments (alts.), 1804 E. Allegheny avenue. Architect, private plans. Owners, Polk Company, 1805 E. Allegheny avenue, Philadelphia. Brick, 2 stories, pine floors, hot air heating, electric lighting. Owners are ready for bids.

Auto Showroom, 1712-14 Race street, Philadelphia. Architect, Frederick Webber, 1421 Chestnut street, Philadelphia. Owner, J. Walter Rosenberg, Broad and Walnut streets, Philadelphia. Reinforced concrete, brick, terra cotta and stone, 2 stories and mezzanine floor, 40x130 feet, slag roof, stone foundations, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal sash and skylights, fire doors, flush bulks, iron stairs, ornamental iron work, cement, oak and mosaic floors, metal lath, wire work. Architect taking bids due January 24th. Albert Zellfelder, 151 South Broad street, and Cramp & Co., Dencka Building, are figuring.

Car Repair Shop (10 bays), Thirty-sixth and Jackson streets, \$30,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passunk avenue, Philadelphia. Iron and brick, 1 story, 88x150 feet, asbestos roof, cement floors, rolled steel sash and skylights, fire doors (heating and lighting reserved). Owners taking bids, due as soon as possible. Wark-Yardley Co., 1737 Filbert street; Conneen Const. Co., 1737 Filbert street; A. L. Carhart, Penfield Building, and Ketcham & McQuade, 1029 Brown street, are figuring.

Parish House, 2023-25-27-29-31 N. Hancock street, Philadelphia. Architect, Peter F. Getz, 1634 North Sixth street, Philadelphia. Owners, St. Bonifacius' R. C. Church, care of Rev. John H. Beierschmidt, Diamond and Norris streets, Philadelphia. Stone, granite trimming, 2 stories, 102x105 feet, slag and slate roof, will contain auditorium, meeting rooms, pool rooms, gymnasium card rooms, etc. Final plans in progress. Too early for details.

Lodge and Stable (alts.), Wissinoming Park, Frankford, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, Department of Public Works, Geo. E. Datesman, Director, City Hall, Philadelphia. Brick, 1 story, tin roof, general alterations, buildings and grounds. Owners taking bids, due January 25th, at noon. Hogg Construction Co., 1634 Sansom street, is figuring.

General Storehouse, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Frankford Arsenal, Philadelphia. Brick and concrete, 3 stories, 70x244 feet, slate roof, maple floors, hollow tile, rolled steel sash and skylights, fire doors, hollow tile, safety treads, roof ventilators, ornamental iron work (heating and lighting, reserved). Owners taking bids, due January 25th. Ketcham & McQuade, 1029 Brown street, are figuring.

School (Claghorne Annex), Woodstock and Susquehanna avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut street, Philadelphia. Consists of fire repairs, mill work, plastering, maple floors. Lowest bidder—E. C. Durell, 1713 North Twenty-fourth street; \$593.

School (Trade School) No. 2 (alts.), Howard and Girard avenue. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Consists of interior alterations to basement, pine floors, electric lighting. Lowest bidder—E. C. Durell, 1713 North Twenty-fourth street; \$1,190.

School, Eighth and Catharine streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut streets. Consists of general interior alterations, mill work, plastering, maple floors, fire repairs. Lowest bidder—Wm. Christy & Sons, 1416 McKean street; \$380.

School (alts.), Eighth and Wolf streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Phila-

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BOTH PHONES

dephia. Owner, Board of Education, Nineteenth above Chestnut streets. Consists of interior alterations, bookcases, cloak rooms, mill work, etc. Lowest bidder—Wm. Christy & Sons, 1416 McKean street; \$376.

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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Stores and Apartments. Fifty-sixth and Chester avenue, Philadelphia. Architects, Chas. W. Bolton & Son, Witherspoon Building, Philadelphia. Owner, Nelson Fry, Nineteenth and Arch streets, Philadelphia. Brick and stone, 3 stories, 35x75 feet, slag roof, hardwood floors (steam heating, electric lighting, plumbing and tile and marble work reserved). Contract awarded to Walter R. Potts (successors to Harrison C. Rea Co.), 1027 Wood street.

Temporary Building. Front street and Boulevard, Philadelphia, \$7,500. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, St. Gabriel's P. E. Church, care of Rev. J. Le Roy, 8020 St. Martins lane, Chestnut Hill, Philadelphia. Frame and combopboard, 1 story, 33x66 feet, shingle roof, pine floors. Contract awarded to Wm. C. Wright, 22 Harvey street, Germantown.

Storage Building (alt. and add.). Forty-ninth and Merion avenue, \$10,000. Architect, private plans. Owners, Standard Roller Bearing Co., Fifth and Lancaster avenue. Steel and wood, 1 story, 50x200 feet, cement floors. Contract awarded to Standard Const. Co., 1713 Sansom street, Philadelphia.

Building (fire repairs), 420 Sansom street, Philadelphia. Architect, Wm. Copeland Furbur, 418 Walnut street, Philadelphia. Owners, Geo. H. Buchanan Co., 420 Sansom street, Philadelphia. Consists of general fire repairs to fifth floor, tin roof, mill work, carpentry work, elevator repairs. Contract awarded to Evans Const. Co., 9 South Eighteenth street, Philadelphia.

Storehouse (alts.), Twenty-fifth and Wharton streets, Philadelphia, \$1,500. Architect, private plans. Owners, U. S. Expeditionary Dept., care of Q. M. Dept., Schuylkill Arsenal. Consists of interior alterations, mill work. Contract awarded to F. A. Havens & Co., 845 N. Nineteenth street, Philadelphia.

Store Building (alts.), 1128 Chestnut street, Philadelphia, \$4,000. Architect, private plans. Owners, Jos. G. Darlington & Co., 1126 Chestnut street, Philadelphia. Consists of reinforcing steel beams and interior alterations. Contract awarded to Geo. F. Payne & Co., 401 S. Juniper street.

Office and Shop Building, 1817-19 N. Twentieth street, \$3,150. Architect, private plans. Owners, Davis & Clayton, 1841 Ginnodo st., Philadelphia. Brick, 2 stories, 27x280 feet,

slag roof, stone foundations, hot water heating, combination lighting, cement floors, pine floors. Owners will build.

Store and Dwelling, 2638 Richmond street (alt. and add.), 3,700. Architect, private plans. Owners, Polish Republican Club, on premises. Brick, 2 stories, 15x20 feet, interior alterations, stone foundations, pine floors. Contract awarded to John W. Janysek, 3169 Tilton street.

Restaurant and Apartments (alts.), 124 S. Thirteenth street, Philadelphia, \$6,000. Architects, Henon & Boyle, 10 S. Eighteenth st., Philadelphia. Owner, J. G. Patton, Fifteenth and Chestnut streets, Philadelphia (Pennsylvania Building). Consists of general interior alterations, addition, brick, 1 story, 5x30 feet, tile and marble work, steam heating, electric lighting, tile and hardwood floors dumbwaiter. Contract awarded to James H. Wilson 1717 Moravian street, who will take sub-bids on all lines.

Woodworking Building, Forty-ninth and Botanic avenue, Philadelphia, \$150,000. Architect, private plans. Owners, Geo. W. Smith & Co., 3907 Powelton avenue, Philadelphia.

Brick, 1 story, 80x280 feet, 80x180 feet, 80x104 feet, and 80x140 feet, stone foundations, slag roof, cement floors rolled steel sash, fire doors. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Store Building (alts. and extension), 132-34 Arch street. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, H. Fliegeman, 35 N. Second street, Philadelphia. Consists of general interior alterations and rear addition, 4 stories, 40x60 feet. Contract awarded to Lam Building Co., 1001 Wood st., Philadelphia.

Bank Building (alts.), 325-31 Chestnut st., Philadelphia, \$6,000. Architect, John T. Windrom, Commonwealth Building, Philadelphia. Owners, The Fidelity Trust Co., Fourth and Chestnut streets, Philadelphia. Brick, stone and concrete work, interior and exterior alterations, slag roof, electric lighting, tile, marble and terrazzo work, hollow tile, metal ath. Contract awarded to F. L. Hoover & Son, 1023 Cherry street.

Factory, 1920-24 E. Venango street, Philadelphia, \$4,000. Architect, private plans. Owners, Quaker City Preserve Co., on premises. Consists of general repair of fire damages. Contract awarded to Barnes Bros., 2080 E. Willard street.

Roof over Shipping Platform, 2626 Grays Ferry road, Philadelphia. Architect, private plans. Owners, U. S. Govt., care of Quartermaster's Dept., Schuylkill Arsenal. Brick, iron and steel, 265x8 feet, slag roof. Contract awarded to Albert Zellfelder, 151 S. Broad street.

PENNSYLVANIA

Construction News

Stores and Apartments (3) (alt. and add.), Marcus Hook, Pa., \$15,000. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, Mrs. Rose Gross, Marcus Hook, Pa. Brick, 2 stories, 64x40 feet slag roof, steam heating, electric lighting, pine floors, bulk windows. Revised plans in progress. Owner will take bids about February 1st.

Stable and Spring House, Radnor, Pa. Architect, Horace Trumbauer, Land Title Building, Philadelphia. Owner, Isaac H. Clothier, Jr., Radnor, Pa. Stone, 1 story and loft, slate roof, electric lighting. Architect taking bids, due January 23d. Stacey Reeves & Sons, 2011 Market street, and Milton W. Young, Overbrook, Pa., are figuring.

Stock Pens and Foreman's Office, Herr's Island, Pittsburgh, Pa. Architects, M. & W.,

Western Division, Pittsburgh, Pa. Owners, Penna. RR., care of F. W. Smith, Jr., Acting Supt., Conemaugh Div., 1003 Penn avenue, Pittsburgh, Pa. Brick and reinforced concrete, 2 stories and 1 story, 382x175 feet, 236 x195 feet and 17x10 feet, asbestos roof, pine and cement floors, electric lighting, rolled steel sash, hollow metal skylights, fire doors, iron stairs, ornamental iron work, hollow tile, metal lath, roof ventilators (heating and cement work reserved). Owners taking bids, due January 25th. J. R. Wiggins Co., Otis Building, Philadelphia, additional bidder.

Residences (38), Elizabeth avenue, Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, L. O. Granley, Bethlehem, Pa. Brick, 2 stories, 16

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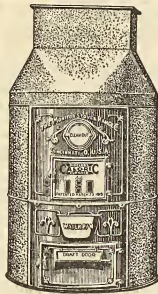
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x28 feet, slate roof, pine floors, electric light-
ing. Plans in progress.

Garage and Apartments, East Third street,
Bethlehem, Pa. Architect, C. F. Spangenberg,
504 Broadway, South Bethlehem, Pa. Owner,
John Malek, Bethlehem, Pa. Brick, 33 stories,
40x35 feet, slag roof, yellow pine floors,
electric lighting, gasoline storage system.
Plans completed. Architect ready for bids.

Apartment Building (alt. and add.), Bethle-
hem Annex, Bethlehem, Pa. Architect, C. F.
Spangenberg, 504 Broadway, South Bethle-
hem, Pa. Owner, John Sallash, R. F. D. No.
3, Easton, Pa. Brick, 4 stories, 43x90 feet,
general interior alterations electric lighting,
plumbing, millwork, plastering. Plans in pro-
gress.

Bungalow Northampton Heights, Pa., \$4,
000. Architect, J. R. Wilt, South Bethlehem,

Pa. Owner, T. Shamenak, South Bethlehem,
Pa. Frame, 1½ stories, 28x48 feet, slate roof,
yellow pine floors. Plans in progress. Owner
ready for sub-bids.

Employment Office, South Bethlehem, Pa.
Architect, private plans. Owners, Bethlehem
Steel Co., care of Mr. Tobias, P. A., South
Bethlehem. Frame, 1 story, 135x27 feet, com-
position roof, pine floors, steam heating, elec-
tric lighting. Owners taking bids. Ochs
Const. Co., Allentown, Pa., and Robt. Rath-
bun, Bethlehem, Pa., are figuring.

Garage and Residence (alt. and add.),
Wyomissing, Pa. Architect, L. D. Lance,
Wyomissing, Pa. Owner, G. P. Lance, Wyom-
issing, Pa. Brick, 1 story, 21x22 feet,
and 12x20 feet, slate and canvas roof, hot
water heating, electric lighting, concrete
and hardwood floors, gasoline storage sys-
tem. Plans in progress.

PENNSYLVANIA

Contracts Awarded

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lowest rates and protect you in every
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Pennsylvania Building

Stable (alt. and add.) (10 box stalls), Mea-
dowbrook, Pa. Architects, Wilson Eyre and
McIlvaine, 1003 Spruce street, Philadelphia.
Owner, Edw. C. Marshall, Rydal, Pa. Stucco,
1 story, 120x16 feet, slate roof, stone founda-
tions, electric lighting hollow tile. Contract
awarded to W. John Stevens Inc., Wyneote,
Pa.

Greek Catholic Church, Edward and Fifth
streets, Northampton Heights, Pa. Architect,
C. F. Spangenberg, 504 Broadway, South Bethle-
hem, Pa. Owners, SS. Paul and Peter Greek
Catholic Union Church, Northampton Heights,

Pa. Brick and stone, 1 story and basement,
50x85 feet, slate roof, stone foundations, tile
and terrazzo work, metal lath, pine floors.
Contract for substructure awarded to Howard
E. Stout, Second avenue, Bethlehem, Pa.

Pay Station for Ammunition Plant, South
Bethlehem, Pa. Architect, private plans.
Owners, Bethlehem Steel Co., care of Mr. To-
bias, P. A., South Bethlehem, Pa. Frame, 1
story, 27x44 feet, J-M roof, pine floors, steam
heating, electric lighting. Contract awarded
to Ochs Const. Co., Allentown, Pa.

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 } Additions
Construction } New Buildings

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NEW JERSEY

Construction News

School Building, Glassboro, N. J., \$75,000.
Architects, Moffett & Stewart, Inc., 30 North
Third street, Camden, N. J. Owners, Board of
Education, Glassboro, N. J. Brick, stone and
reinforced concrete, 2½ stories, 70x146 feet,
slag roof (steam heating, electric lighting,
plumbing and furniture reserved), rolled steel
sash, wood and composition floors, metal lath,
safety treads, roof ventilators, fire and kala-
main doors, dampproofing, ornamental iron
work. Architects taking bids, due January
25th. (Note extension in time.) The follow-
ing are figuring: R. C. Ballinger & Co., 218
N. Thirteenth street; Evans Const. Co., 9 S.
Eighteenth street; Wills-Ludwick Co., 34 S.
Seventeenth street; Metzger & Fisher, Otis
Building, Philadelphia; W. Beaumont, 12 S.

Tennessee avenue, Atlantic City, N. J.; Geo.
W. Shaner & Son, Palmyra, N. J.; Geo. Bach-
mann, 19 N. Thirtieth street, Camden, N. J.;
Frank C. Ware, Glassboro, N. J., are figuring.

School, Princeton Borough, N. J. Archi-
tect, Robt. Schumman, 932 Lambertson street,
Trenton, N. J. Owners, Princeton Township
School Commission, Princeton Borough, N. J.
Brick, 2 stories, 42x85 feet (4 rooms), slate
roof wood floors. Revised plans in progress.

Cottage Titusville, N. J., \$5,000. Architect,
Harry Hill, Trenton, N. J. Owner, name with-
held. Frame, 2 stories, 30x40 feet shingle
roof, pine floors, hot air heating. Plans in
progress.

School (add.), near Trenton, N. J., \$30,000.
Architect, Harry Hill, Trenton, N. J. Owner,

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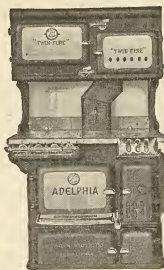
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name withheld. Brick, 2 stories, 96x64 feet, slate roof, steam heating, electric lighting, kalamain doors, iron stairs, wood and composition floors hollow tile. Plans in progress.

State Prison (add.), Trenton, N. J. Architect, F. H. Bent, State Capital, Trenton, N. J. Owners, State of New Jersey, State Board of Prison Inspectors, Trenton, N. J. Stone, 2 stories, 146x40 feet, steam heating, electric lighting, concrete floors. Owners will sub-let.

Convalescent Home, near Trenton, N. J., \$100,000. Architect, private plans. Owners, U. S. Govt., care of Surgeon General, Washington, D. C. Frame, 2 stories, consists of general farm buildings, including dairy building, hog house, cow barn, etc. Plans in progress. Details undecided.

Factory Building (add.), 507-09 Arch street, Camden, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owner, Camden Auto Radiator Repair Co., Camden, N. J. Brick, 2 stories,

75x20 feet, slag roof, wood floors (elevator, plumbing, heating and electrical work, reserved). Architects will take bids, due February 1st. Plans will be ready January 23rd. The following will figure: Evans Const. Co., 9 South Eighteenth street, Philadelphia; M. O. Schulke, 1183 Jackson street; Wm. Wrifford, 525 Market street; L. T. West, 828 Broadway, all of Camden, N. J., and Peterson Const. Co., Clayton, N. J.

Store Building (alt.), 224 Arch street, Camden, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owner, J. B. McNally, care of architects. Brick, 2 stories, general interior alterations, mill work, plastering, electric lighting. Contract awarded to Evans Const. Co., 9 South Eighteenth street, Philadelphia.

hot water heating, stone foundations.

Shed (temporary), Broad, south of League Island Park, \$500. Cantrell Const. Co. (O and C), Thirtieth and Walnut streets. Frame, 1 story, 18x32 feet.

Office Building, Fifth and Montgomery avenue, \$8,000. John B. Stetson Co. (O and C), on premises. Brick, 1 story, 37x29 feet and 23x29 feet, steam heating, slag roof.

Alterations and Additions

Dwelling, 1232 North street, \$420. J. R. Massen & Co. (O), Thirteenth and Green sts. Robt. Werner (C), 812 N. Twelfth street, Fire repairs.

Storage Building, Hedlin and Carhoubt sts., \$500. White Bros. (O and C), on premises. Frame, 50x50 feet, 1 story.

Factory, 1920-24 E. Venango street, \$4,000. Quaker City Preserve Co. (O), on premises. Barnes Bros. (C), 2080 E. Willard street. Fire repairs.

Warehouse, 819 N. Second street, \$300. Wm. J. Montgomery Est. (O). American Pharmaceutical Co. (C), 819 N. Second street. Alterations.

Storehouse, Twenty-fifth and Wharton sts., \$1,500. U. S. Expeditionary Dept. (O), Philadelphia. P. A. Havens Co. (C), 845 N. Ninth street. Alterations.

Store and Storage, 239 S. Third street, \$380. H. Zollers (O), on premises. H. Blumenthal (C), 313 Spruce street. Alterations.

Office, 222-24 Walnut street, \$12,000. Mather & Co. (O), 226 Walnut street. A. Raymond Raff Co. (C), 1633-35 Thompson street. Brick, second story addition, 35x70 feet, reinforced concrete, slag roof.

Guard House, Passyunk avenue and Twenty-eighth street, \$275. Atlantic Refining Co. (O and C), 3144 Passyunk avenue. Brick, 1 story, 7x13 feet, slag roof.

Storage Building, Forty-ninth and Merion avenue, \$10,000. Standard Roller Bearing Co. (O and C), Fiftieth and Lancaster avenue. Interior alterations.

Storage Building, 3211 Kensington avenue, \$2,700. Max Sarfest (O), on premises. Harry Brockelhurst (C), 512 W. Norris street. Alterations and fire repairs.

Store, 2629 Kensington avenue, \$1,200. Harry Rosenthal (O), on premises. William F. Stone (C), 2069 E. Dauphin street. Repair fire damage.

Dwelling, 504 N. Sixty-fourth street, \$300. N. Delecco (O and C), on premises. Brick, 2 stories, 12x5 feet, slag roof.

Bank Building, 921-925 Chestnut street, \$10,000. Federal Reserve Bank (O), 408

Miscellaneous Construction News

Residence and Garage (alt. and add.), Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, name withheld. Brick and stone, 2 stories; garage, 20x34 feet, tin roof, concrete floors and hardwood floors, consists of general interior alterations, electric lighting. Plans in progress.

Garage, Tenth and French streets, Wilmington, Del. Architect, W. E. Hance, 204

W. Twenty-fourth street, Wilmington, Del. Owner, Dr. S. G. Elbert, Eighteenth and French streets, Wilmington, Del. Brick, 3 stories, 100x65 feet, concrete roof, concrete floors, electric lighting, rolled steel sash and skylights, fire doors, metal lath, elevators, gasoline storage system. Plans completed. Architect will take bids in a few days.

Permits for New Buildings

O is the abbreviation for owner. **C** is for contractor.

Philadelphia

Garage, 39 South Fifty-ninth street, \$500. Chas. Spivak (O), on premises. Abram Singer (C), 37 South Fifty-ninth street. Brick, 1 story, 16x16 feet, slag roof.

Boiler House, Fifty-second and Grays avenue, \$8,000. Tigra Steel & Iron Co. (O), on premises. Crowell Lufdoff & Little Co. (C), Fifty-second and Grays Ferry road. Steel and corrugated iron, 1 story, 50x50 feet.

Wood Working Building, Forty-ninth and Botanic avenue, \$150,000. Geo. W. Smith & Co. (O), Thirty-ninth and Powelton avenue.

John N. Gill & Co. (C), Otis Building. Brick, 1 story, 80x280 feet, 80x480 feet, 104x80 feet, 80x440 feet, stone foundation, steel sash, slag roof.

Office and Shop, 1817-19 N. Twentieth st., \$550. Davis & Clayton (O and C), 1841 Ginnodo street. Brick, 2 stories, 37x280 feet, slag roof, cement floor, stone foundation.

Dwellings (24), Allegheny avenue, Newkirk and Dover streets, \$51,800. Morris L. Miller (O and C), 1202 Commonwealth Building. Brick, 2 stories, 15x55 feet, slag roof,

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Chestnut street. Doyle & Co. (C), 1519 Sansom street. Interior alterations.

Shed, 412 Moyer street, \$1,000. James F. Griffith (and C), 416 Moyer street. Brick alterations to wall.

Store and Dwelling, 1413 Frankford avenue, \$1,000. Mary A. Herommuus (O), on premises. H. A. Hobert (C), 2620 E. Cumberland street. Fire repairs.

Pipe Shop, Thirty-first street, south of Chestnut street, \$1,000. Bridgman Bros. (O), on premises. J. Borden Bros. (C), 637 North Nineteenth street. Interior alterations.

Wash Room, Fifty-second and Grays avenue, \$1,800. Tioga Iron & Steel Co. (O), on premises. Geo. J. Downard (C), 2125 Frazier street. Brick, 1 story, 15x37 feet, slag roof; brick, 1 story, 10x21 feet, slag roof.

Dwelling, 3367 Frankford avenue, \$1,000. John Gottingham (O and C), on premises. Fire repairs.

Machine Shop, Church and Taekawanna streets, \$10,000. C. V. Roberts (O and C), Ruan and Taekawanna streets. Brick, 1 story, 46x90 feet, slag roof; brick, 1 story, 35x76 feet, slag roof.

Factory, Seventeenth and Wood streets, \$5,000. E. M. Green (O), 1415 Vine street. John Welsh (C), 138 N. Seventeenth street. Fire repairs, new roof.

Store and Dwelling, 621 Passyunk avenue, \$800. A. E. W. Steinberg (C), 333 Walnut st. N. Rozinsky (C), 520 Dickinson street. Repair fire damage, new bulk and floor.

Hotel, 205 N. Ninth street, \$1,000. Butterwood Building & Loan Assn. (), 5055 Chestnut street. H. G. Evans (C), 1417 Warnock street. Fire repairs.

Warehouse, 2524-26-28 Market street, \$4,000. Altee Doureloure (O), 103 Walnut st.

F. S. Coffin (C), 325 Commercial Trust Building. Brick, second and third story addition, 40x50 feet, also interior alterations.

Store Building, 1128 Chestnut street, \$4,000. H. Darlington (O), on premises. Geo. F. Payne Co. (C), 401 S. Juniper street. New steel beams in place of wood and alterations.

Dwelling, 4037 Pine street, \$500. U. of P. (O and C), Thirty-fourth and Woodland avenue. Brick, 1 story, 13x5 feet, stone foundation, addition.

Banking Offices, 3014 Market street, \$560. D. B. Martin Co. (O), Thirtieth and Market streets. Henry P. Friend, Inc. (C), Norris-town, Pa. Alterations.

Dwelling, 527 E. Washington lane, \$450. John J. O'Sullivan (O), on premises. W. John Stevens, Inc. (C), Wyncote, Pa. Alterations.

Power House, American and Susquehanna avenue, \$350. Enterpriser Mfg. Co. (O and C), Third and Dauphin streets. Hollow tile, 1 story, 14x21 feet, slag roof, reinforced concrete.

Store and Dwelling, 2628 Richmond street, \$3,700. Polish Republican Club (O), on premises. John W. Janyszek (C), 3169 E. Tilton street. Brick, 2 stories, 15x20 feet, slag roof, stone foundation and interior alterations.

Store, 126 N. Eighth street, \$825. Paul Myers (O), Franklin and Poplar streets. Jos. Sheehman (C), 1734 N. Seventh street. New flush bulk.

Store Building, Thirteenth and Market sts., \$1,000. Provident L. & T. Co. (O), Fourth and Chestnut streets. Frank Rieder & Sons (C), 343-49 N. Fourth street. Alterations.

Store, 1725 Sansom street, \$1,000. F. P. Mellon Est (O), 34 South Seventeenth street. C. Dougherty (C), 1725 Ludlow street. Brick, 1 story, 9x15 feet, flush bulk and alterations.

1906, \$3.78; 1916, \$4.50. Outside—1903, \$4.50; 1906, \$4.50; 1916, \$5.00. Agreements expire Dec. 31, 1918.

Carpenters (Brooklyn), Shop Work—1906, \$3.78; 1916, \$4.50. Outside—1903, \$4.30; 1906, \$4.50; 1916, \$5.00. Agreements expire Dec. 31, 1918.

Carpenters (Richmond), Shop Work—1906, \$3.78; 1907, \$3.78; 1916, \$4.50. Outside—1903, \$3.80; 1906, \$4.00; 1907, \$4.00; 1916, \$4.50. Agreements expire Dec. 31, 1918.

Carpenters—Dock Builders and Pole Drivers, 1916, \$4.50 a day; foreman, \$36.00 a week; 1918, \$4.50.

Cement Masons—1905, \$4.80; 1906, \$5.00; 1916, \$5.30; 1917, \$5.60. Agreement expires December 31, 1919.

Cement and Asphalt Workers—"Class A," 1906, \$4.80; 1910, \$3.00; 1916, \$3.00. Agreement expires Dec. 31, 1918.

Composition Roofers—1903, \$2.75; 1906, \$3.00; 1910, \$3.25; 1914, \$3.50; 1917, \$3.75. Foreman, \$4.50 a day. Agreement expired Dec. 31, 1917; 1918, unsettled.

Elevator Constructors—1904, \$4.50; 1910, \$5.00; 1913, \$5.28; 1917, \$5.52. Agreement expires Dec. 31, 1918.

Elevator Constructors' Helpers—1904, \$3.00; 1910, \$3.20; 1913, \$3.40; 1917, \$3.52; 1918, \$3.52.

Electrical Workers—1903, \$4.00; 1908, \$4.50; 1914, \$4.80; 1916, \$5.00; 1917 (April), \$5.20. Agreement expires Dec. 31, 1919.

Electrical Workers' Helpers—1903, \$1.50-\$2.20; 1916, \$2.00; 1917 (April), \$2.50. Agreement expires Dec. 31, 1918.

House Shorers—1903, \$2.75; 1906, \$3.36; 1907, \$3.47; 1912, \$3.68; 1917, \$4.00. Agreement expires Dec. 31, 1918.

House Shorers' Helpers—1903, \$2.25; 1906, \$2.65; 1907, \$2.65; 1915, \$3.00; 1918, \$3.00.

Housesmiths (Structural)—1900, \$3.80; 1902, \$4.50; 1910, \$5.00; 1916, \$5.30; 1917 (Jan.), \$5.50, (July) \$5.80, (Oct.) \$6.00; 1918 unsettled.

Housesmiths (Structural) Finishers—1916, \$5.30; 1917 (from Sept. 1), \$5.50; 1918, \$5.50.

Housesmiths (Structural) Helpers—1916, \$3.80 (from Sept. 1), \$4.00; 1918, \$4.00.

Engineers (Hoisting Assn., Cement League and Stone Setters)—1903, \$5.00; 1906, \$5.50; 1912, \$5.75; 1913, \$6.00; 1917 (July), \$6.50. Running pump, 1903, \$4.00; 1906, \$4.50; 1912, \$4.75; 1913, \$5.00; 1917 (July), \$5.50. Agreement expires Dec. 31, 1919.

Marble Cutters and Setters—1903,

WAGE SCALES IN THE BUILDING TRADES

Comparative Figures Showing How Wages Have Advanced in Every Branch of Construction During the Past Two Years.

Asbestos Workers—1903, \$4.00; 1907, \$4.50; 1912, \$4.65; 1917, \$5.00; 1918, \$5.00.

Asbestos Workers' Helpers—1903, \$1.60-\$2.40; 1911, \$2.80; 1912, \$2.90; 1917, \$3.00; 1918, \$3.00.

Blue Stone Cutters, Flaggers, Bridge and Curb Setters—1903, \$4.40; 1906, \$4.50; 1917, \$5.00; 1918, \$5.00.

Bricklayers—1903, \$5.20; 1905, \$5.60;

1914, \$6.00. This scale applies until Dec. 31, 1917; 1918, unsettled.

Bricklayers' Laborers—1903, \$2.80; 1907, \$3.00; 1916, \$3.40; 1918, unsettled.

Carpenters (Manhattan), Shop Work—1903, \$3.75; 1906, \$4.00; 1907, \$4.00;

1916, \$4.50. Outside—1903, \$4.50; 1906, \$4.80; 1907, \$5.00; 1916, \$5.50. The above agreements expire Dec. 31, 1918.

Carpenters (Bronx), Shop Work—

Buy pure lime, 99% pure, no core, no grit. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Phila. Both 'phones.

\$5.00; 1913, \$5.50. Agreement expires July 1, 1920.

Marble Carvers—1903, \$5.00; 1913, \$6.00. Agreement expires July 1, 1920.

Marble Polishers—1903, \$4.00; 1913, \$4.40; 1917, \$4.70. Agreement expires July 1, 1920.

Marble Workers' Helpers—1903, \$3.00; 1913, \$3.25; 1917, \$3.50. Riggers, 1903, \$3.50; 1913, \$3.75; 1917, \$4.00. Derrickmen, \$4.00. Cranemen, \$3.75. Agreement expires July 1, 1920.

Marble Bed Rubbers—1903, \$4.50; 1913, \$4.95; 1917, \$5.00. Sawyers, 1903, \$4.25; 1913, \$4.68; 1917, \$4.68. Agreement expires July 1, 1920.

Marble Machine Workers—1903, \$5.00; 1913, \$5.50. Agreement expires July 1, 1920.

Metallic Lathers—1903, \$4.00; 1904, \$4.00; 1905, \$4.50; 1910, \$4.80; 1911, \$5.00; 1915, \$5.30; 1916, \$5.50. Agreement expires Dec. 31, 1917; 1918, unsettled.

Mosaic Workers (First Class)—1902, \$3.75; 1906, \$4.00; 1907, \$4.25; 1913, \$4.50; 1916, \$4.75; 1918, \$5.00. Second Class, 1902, \$3.50; 1906, \$3.75; 1907, \$4.00; 1913, \$4.25; 1916, \$4.50; 1918, \$4.75.

Painters—1902, \$3.50; 1906, \$3.50; 1916, \$5.00; June 1, 1918, \$5.50. Decorators, 1903, \$4.00; 1906, \$4.00; 1916, \$5.00. Scale has expired, but these prices are being maintained.

Plasterers—1903, \$5.50; 1916, \$6.00. Agreement expires Jan. 1, 1919.

Plasterers' Laborers—1903, \$3.25; 1916, \$3.50; 1918, \$3.75.

Modelers and Sculptors—1903, \$30 a week and over. Artificial Marble Workers, 1903, \$5.50; 1916, \$6.00. Rubbers and Polishers, 1903, \$3.50; 1916, \$3.75.

Plumbers—1903, \$4.25; 1904, \$4.50; 1906 (February), \$4.75; 1906 (Oct.), \$5.00; 1910, \$5.50; 1917 (July), \$6.00. Agreement expires July 1, 1920.

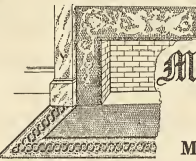
Slate and Tile Roofers—1904, \$4.25; 1906, \$4.75; 1913, \$5.25; 1914, \$5.50; 1918, unsettled.

Steam Fitters—1903, \$4.50; 1906, \$5.00; 1911, \$5.50; 1917 (July), \$6.00. Agreement expires Jan. 1, 1920.

Steam Fitters' Helpers—1903, \$2.65; 1906, \$3.00; 1917 (Apr.), \$3.20; 1917 (July), \$3.40. Agreement expires Jan. 1, 1920.

Stone Cutters (First Class)—1903, \$5.00; 1913, \$5.50; 1916, \$5.50; (Second Class), 1903, \$4.50; 1913, \$5.00; 1916, \$5.00. This class was abolished Jan. 1, 1918. Agreement expires December 31, 1918.

Roofers and Sheet Metal Workers—



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1903, \$4.00; 1905, \$4.50; 1910, \$4.75; 1913, \$5.00; 1918, \$5.60.

Stone Masons—1903, \$4.20; 1906, \$4.40; 1908, \$4.60; 1913, \$4.80; 1916, \$5.00; 1918, \$5.00.

Stone Setters—1903, \$5.00; 1904, \$5.50; 1911, \$5.60; 1914, \$6.00; 1918, unsettled.

Stone Masons' Laborers—1903, \$2.00; 1906, \$2.25; 1908, \$2.40; 1912, \$2.64; 1913, \$2.80; 1916, \$3.00; 1918, unsettled.

Tile Layers—1903, \$5.00; 1913, \$5.50;

1917, \$6.00. Agreement expires Jan. 1, 1920.

Tile Layers' Helpers—1903, \$3.00; 1916, \$3.25. Agreement expires Jan. 1, 1920.

Wood Carvers—1906, \$3.75-\$5.00. The rate at the present time is \$5.50.

Wood Workers—1903, \$15.00-\$18.00 a week, 50 hrs.; 1906, \$15.00-\$19.00 a week, 50 hrs.; 1915, \$18.00 a week, 48 hrs.; 1916, \$18.00 a week, 44 hrs.; 1918, unsettled.

WORK OF LOUIS CHRISTIAN MULLGARDT, F. A. I. A.

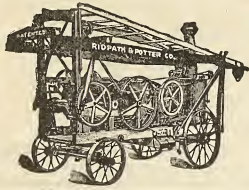
In a scene of one of his lesser comedies, Moliere represents a young girl gravely ill, visited by a number of physicians. Without investigation into her malady, which is in reality an acute case of lovesickness, one representative of the Faculty of Medicine maintains on purely empirical grounds that her life can be saved by bleeding alone, while another declares on equally empirical grounds that bleeding will be certain death, and only an emetic can prove effectual. With mutual recriminations they leave the room, while another of the physicians present explains to the distracted father that it is better a patient die in accordance with the authorized rules than recover in violation of them.

The analogy with the present state of architecture is suggestive. Both practitioners and spokesmen of the art are divided into antagonistic and mutually recriminatory schools, each appropriating the decorative apparatus of a particular period of the past, and stoutly maintaining that there is no salvation outside of its own chosen "style." Around these de-

tails, which are unessential, rages a contest waged with an acrimony worthy of a better cause, while composition, which is fundamental, stands apart untroubled, beyond the field of discussion. A point of doctrine of all schools, which their several adherents often maintain with the most disconcerting courage of conviction, appears to be that it is better to make a poor composition in the correct style than to make the best composition in the world in an unauthorized style.

To those for whom salvation lies not in a cusp or a modillion and who are not intimidated by the mental labor exacted in adjusting old standards of judgment to new manifestations of principles, the architecture of Mr. Mullgardt comes as a welcome relief to a strained situation, if for no other reason than that, being assignable to none of the various contending schools, it can be used by none as propaganda. Yet detachment is purchased at the price of vigilance. Independence imposes the necessity of guarding against friends and foes alike, for it risks

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being equally misunderstood by each. It is perhaps unreasonable to expect that the large public should exhibit the mental poise which can apprehend principles and the mental flexibility which can apply them to varied cases. Subscription to a clearly formulated creed becomes a necessity, since it offers a guide to action and to judgment clothed with authority which needs no verification. But there are more things in heaven and earth than are dreamt of in our philosophies; and anything which contradicts or transcends the formulae of the creeds pays the penalty of being misjudged, if not condemned.

In addition to putting before the public an architecture which even the most benevolently intentioned public is unprepared to judge on its own merits, Mr. Mullgardt offers a direct affront to the purists, who are representatives of the vested interests of art. Whatever other sins of omission or commission may be charged to his account, with a gusto betraying an energetic enjoyment and with an admirable impartiality he flouts the established rules of all schools alike. Mediocre, even bad, architecture may be condoned, provided decorum remains unviolated; but open disrespect is the one offense which cannot be pardoned.

Thus it happens that the architectural non-conformist, with discrimination overborne by enthusiasm, cries out, Here is a man who makes a column not nine diameters high, a pediment which slopes not at the authorized angle, who uses bases and cornices and ornaments I can find in none of the books; he tramples time-worn rules and obsolete precedents; he possesses imagination and originality, and his architecture is a great step in the progress of the art.

The representative of the schools shows more restraint. He asks laconically, What style is it? knowing in advance that the only answer possible is, None. The question is put with a complacent smacking of lips in anticipation of the confusion that should attend so amorphous a reply. Then he indulgently explains that this man presumes to employ motifs and details which can be found in none of the books, that he violates time-honored rules and established precedents, that his architecture has no firmer basis than his own imagination and originality, and is thus negligible in the development of the art.

It may be presumed that there were in the sixteenth century people who, intoxicated by

the knotty exaggeration of joints and muscles in Michelangelo's painting and sculpture, proclaimed him a great artist; and others who, offended by his liberties with anatomy, pronounced him a mere mannerist; neither group of contestants ever backing off from the works far enough to see them whole and apprehend that important principles of composition were involved to which these and similar matters of detail were subsidiary.

The truth is that the judgments which lead to such controversies are founded upon nothing more authoritative than the fortuitous sympathies and antipathies of personal taste, and bear as little relation to the underlying principles of art as the like or the dislike for oranges bears to the principles of botany. Few people possess a sufficient grasp upon abstractions to apprehend principles except in the concrete instances where they have been formulated into rules of practice. Yet rules are but special cases of principles. A rock substructure underlies and determines the nature of the earth's superficial conformations. It is visible only where it breaks the surface in isolated outcroppings; and even these occasional open evidences of the nature of the fundamental structure are liable to misinterpretation, save by the geologist of insight and training. To the ordinary observer architectural principles are visible only where they outcrop in a particular style. Thus are formulated rules which, whatever their validity in the case of their origin, are more than likely to be inapplicable under the altered circumstances of differing cases. While it is emphatically not true that a contempt for rules necessarily indicates an appreciation of principles, nevertheless it is unquestionable that the man with an insight into principles will without prejudice or preconception evaluate any rule at its real worth.

On two points at least both Mr. Mullgardt's admirers and detractors appear to agree. Both readily accord him imagination and originality; both assign by implication a similar meaning of these terms. Yet it must be obvious that his architecture cannot be both good and bad, and for the same reasons. A pause in passing at the point of divergence of these opposed estimates, and an effort toward an understanding of what imagination and originality really are, may not be without some value.

Imagination would appear to be identified

as a free use of unusual details. This accords with the popular understanding of the word. Imagination is commonly attributed to whatever is exuberantly fantastic or vague and intangible; wherever confusion, unrest, or uncertainty must have prevailed in the mind of the artist; and works of art are regarded as imaginative in proportion to their departure from the real or from the familiar. Few people would question that the Cathedral of Rheims, or the portraits of Rembrandt exhibit imagination; but probably many would with reluctance admit the justification of the term if applied to the Parthenon, or to the portraits of Velasquez. The Gothic Cathedral and the Dutchman's paintings are felt to possess qualities of strangeness and aloofness from ordinary affairs, which entitle them to consideration as imaginative; while the Greek Temple and the paintings of the Spaniard seem to consist of elements too ordinary, and to produce effects too simple and unequivocal, to warrant the use of the term. Now it so happens that both the Cathedral of Rheims and Rembrandt's portraits are imaginative to an unusual degree. But they are so not because they contain something new and strange, but because in each case the artist proceeded with full assurance by deliberately considered means to predetermined ends. Imagination is none other than the power of forming images; and in proportion as the artist's vision has been distinct is the work entitled to be distinguished as imaginative. By this test are the Parthenon and Velasquez's portraits recognized as works of the highest imagination, because only by clear insight and steady vision could results so incisive and authoritative have been achieved. And by the same test much art loosely classed as imaginative must be rejected as totally lacking in imagination because conceived and executed without certainty of intent. Novelty, strangeness or vagueness is not a necessary concomitant of imagination. But imagination is a fundamental necessity of all art; for achievement can proceed only from insight and understanding. It is impertinence for a man who is uncertain as to his aim or as to the proper method of its realization to put forward any claim to attention.

To discuss originality here in its philosophical and esthetic bearings is neither possible nor necessary; a few examples will suffice to indicate the desired point of view.

Shakespeare, one of the most original geniuses of all time, gathered from known and recognized sources the elements of almost his entire output. He is not rated as the inferior of Ben Jonson because the latter largely invented the plots of his own plays; nor is the "Merry Wives of Windsor" regarded with any special esteem among the plays of Shakespeare because its plot appears to be unique in having been invented by the dramatist himself. The debts of Turner to Claude Lorraine and of Rodin to Michelangelo are palpable and avowed; yet both Turner and Rodin are out-

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standing figures for originality. Although from remote times the colonnade has been favored architectural material, there are probably few architects to-day who would neglect the opportunity to execute a monumental colonnade. But had Shakespeare only transcribed into dialogue his Holinshed, his Plutarch, or a novel of Greene, or had Turner copied pictures of Claude, or Rodin copied statues of Michelangelo, or were a modern architect to build a replica of Bernini's or of Perrault's colonnades, any one of these performances would be considered too stupid to deserve notice.

The use of the story of Electra and Orestes is interesting in this connection. The legend was well known when used by Aeschylus in the Libation Bearers. Sophocles later treated the same story in his Electra; and subsequently Euripides produced a similarly entitled play on the same subject. All of this occurred within the possible lifetime of a man; yet neither Aeschylus, Sophocles nor Euripides suffers the charge of lack of originality. Had the play of Aeschylus, however, opened the eyes of the ordinary Athenian to no new aspect of the legend, or had the plays of Sophocles and Euripides been no more than verbal paraphrases of the plays of their predecessors, they would have failed to receive the attention due to serious works of art. It is impossible to attempt here to trace subsequent appearances of the story through later times, down to its treatment in our own day in the opera by Richard Strauss. Suffice it to say that in all the discussion which has raged about his Electra no one has ever thought of condemning him for lack of originality because the subject treated was already well known. As for the final verdict of future generations on this opera, it will depend upon the degree to which it is felt that the composer has realized and expressed some hitherto unsuspected or unemphasized potentialities latent in the story.

On the other hand, the straining after novelty for its own sake has generally proved barren. Illustrations are less readily advanced from literature and painting because of the happy circumstance that in these arts whatever has failed to justify itself is readily put out of sight and forgotten, save by the antiquarian scholar. Architecture and sculpture are less fortunate, as will be attested by all who recall the excesses of the Churrigueresque architecture in Spain, or of Baroque architecture and sculpture in Italy and Germany.

It is difficult to stop the multiplication of illustrations where pertinent ones are so numerous. Those which have been adduced, along with further examples which will spring to every mind, all enforce the conclusion that a work which possesses little or no novelty may be recognized as original, and that to a work of unquestioned novelty the neglect of laws of superior importance may prove fatal. Originality in the guise of novelty, the introduction of features for which an obvious pre-

cedent is lacking, is of no consequence to a serious work of art, either by way of enhancing or impairing its value. But the originality which is independence of vision is equally essential with the clearness of vision which has been defined as imagination. Words are all derived from the same dictionaries and facts from the same encyclopedias; but those who adopt other people's arrangements of words to repeat other people's ideas in regard to the facts perform a futile task.

Imagination—insight into the problem combined with a clear visualization of its solution; sincerity—the loyal pursuit of this vision, and the steadfast rejection of all effects which do not derive from and enforce the expression of a personally visualized solution; instinct for composition—the ability to manipulate in space the forms most proper for the expression of this solution—these are the qualities, intellectual, moral, and artistic, essential to the production of architecture considered as an art. These are exacting criteria; yet Mr. Mullgardt's architecture emerges successfully from a searching examination by their light.

Mr. Mullgardt possesses a mind relentlessly critical. No subject, however remote, is immune from the importuning of his Why? nor does any institution carry sufficient authority to be spared if an adequate answer is not forthcoming. But wherever he destroys he forthwith replaces with a creation of his own, bringing to the aid of this work of reconstitution an inexhaustible fertility of invention. This is the key to his work.

In solving his problems he brushes aside with impatience the incrustations of prejudice, and confronts each problem squarely on the basis of its own individual demands. The impressionists would claim him for their fold. The "innocence of the eye" of their painters before a new landscape is not more complete than what might by analogy be termed his "innocence of intellect" before a new program. Yet however unprecedented his solution, it betrays none of the uncertainty of tentative, but appears with a completeness as if guaranteed by the authority of tradition. Every work, from the large phases of the composition down to the minutiae of the details, is pervaded by an entire consistency which could be achieved only by the most distinct visualization. This is a characteristic which no sensitive observer will have failed to note; but only a person who has enjoyed the privilege of working with Mr. Mullgardt can appreciate the full force of an imagination which permits the solution of problems mentally down to figures and details before pencil is touched to paper.

Mr. Mullgardt is a man without preconceptions. A preconception is a tacit suspicion lest ingenuity be wanting to envisage new situations on their own merits. Mr. Mullgardt's ingenuity is inexhaustible. Yet a facility of invention which might readily exaggerate into extravagance is tempered by in-

tellectual integrity and the inhibition of taste. Every composition expands obediently to one informing principle. No effect, however enticing, is allowed for a moment to distract his attention from this governing idea. With an unconcern almost ruthless he discards any feature the moment it becomes apparent that it is not serving the main purpose.

It may be well in this connection to correct a misconception which arises from the attempt to interpret Mr. Mullgardt's art by irrelevant standards. It is frequently assumed that he belongs to the Come-Let-Us-Be-Original-and-Create-a-New-Art School; that his innovation is purely wanton, and springs from a desire for indifference at any price. The novelty of Mr. Mullgardt's work is in a sense a by-product of a conscientious consideration of the problem, rather than an end sought in itself. His mind tends to particularize rather than generalize. Because all problems vary, there must be variation in sensitive solutions. Innovation is not deliberate, but imposed by circumstances. He is at the opposite pole from the insincere poseur; originality is a condition of his sincerity.

Mr. Mullgardt's inventiveness is also averted from extravagance by an instinct for the significance of form, in its large aspects, its minor suggestions, and its most remote implications. Along with invention goes a power of selection and assimilation, transmuting as by a subtle alchemy the materials furnished by an active memory. There is a current impression that Mr. Mullgardt lives in proud ignorance of all past architecture, and conjures his own material out of the void. The opinion rests on no pretension on his part; it is due rather to the fact that his critics' observation is less keen and their knowledge and experience of smaller range than his own. His ignoring of the rules of the past does not result from ignorance of the achievements of the past.

Reference to serious standards reveals the inadequacy of making the peculiarities of what might be called Mr. Mullgardt's personal idiom the basis of a judgment of his work. To one mind his details will appeal with delightful piquancy; on one differently constituted they will produce a contrary effect. But irrespective of the bias of taste, every critical observer must appreciate that his work is of large significance, for, in addition to its being an achievement in personal creation noteworthy for vigor, poise, and consistency, it is firmly founded on, and eloquently exemplifies the fundamental principles of the art. Were one to seek a formula classifying Mr. Mullgardt in the fewest possible words, it might be said that he is an individualist of exceptional independence, fallen upon an era of almost negligible social authority. The combination is a perilous one, which would surely spell disaster for any but a strong man.—Irving F. Morrow in "The Architect and Engineer," of California.

THE LOAFER.

You can always tell a loafer, if there's loafin' in the crew;
 You can always tell a loafer, for he has so much to do;
 When the men are in the maintop he is fussin' with a jib;
 On the drive he's always lookin' for a chance away to snib;
 In the woods the smallest timber is the timber he will find;
 In the yard the twelve-by-twenty is the kind he leaves behind.
 He will fuss an' he will fiddle huntin' up the soiest snap;
 Life is one eternal treadmill for the take-it-easy chap.
 Yes, it takes a lot of trouble skippin' labor day by day;
 For a fellow has to figger how to dodge it all the way.
 On the drive or in the timber, in the mill or in the yard,
 You can always tel. a loafer, 'cause he works so bloomin' hard.

The man who doesn't advertise because he can't afford to "do it right" will never reach a position of affluence because everything worth while in the world had to have a beginning, and there can be no "get there" for the fellow who fails to make a start.

GROWING DEMAND FOR LUMBER.

The Federal requirements for lumber are immense, and for the current year a large percentage of the available supply will be used for military purposes or for

some usage allied to war activities. According to a report by the Southern Pine Association, portable knock-down wood houses, to be erected of standard panels fabricated in the United States and shipped abroad to be used for hospitals and barracks by the American forces in France, will require approximately 300,000,000 feet of pine lumber. This type of house was decided upon for use in Europe owing to the scarcity of labor. Panels of a standardized size, made in this country, can be put together quickly with bolts by the troops on the other side. The lumber mills will furnish the material only, and the panels will be built under separate contracts. Other phases of Governmental requirements are looming up large, and the lumber industry will feel itself severely taxed in keeping abreast of the military demands. Lumber prices are generally firm, with the tendency toward advances that has now been noticeable for a period of months. The outlook for the coming spring is good, and if the transportation problems are settled and the expected building movement arrives the lumber producers and dealers should have no cause for complaint.

STARTING THE NEW YEAR.

Another year has started and to the allied building interests of this city and the adjacent territory the coming months are fraught with possibilities, great or small, largely according to the mental attitude of the individuals that make up the industry. Naturally there are numerous other factors, beside a mental viewpoint

to be considered, but a proper approach to the problems that have maintained, and that in a large measure continue to confront the building fraternity, will do much to relieve the depression that has so adversely affected structural conditions.

The start of a new year is no time to bewail the disappointments of the past. Rather it is a time to co-ordinate individual efforts to make the coming twelve months a better period from every viewpoint inssofar as it is humanly possible to do. During the past year the conditions were admittedly bad and there was a just cause for much of the depression, yet the building industry as a unit also made its mistake and it is from this angle that considerable improvement can be looked for. Mistakes are oftentimes of immeasurable benefit, particularly when they bring home in a definite manner exactly what might have been possible had the other course been chosen. The mistakes of the building interests during the last twelve months were obvious ones, and unquestionably during the current year the experience so dearly bought will be profitable to the builders and their allied interests.

It is sincerely to be hoped that with the unfolding of the new year the general conditions affecting the building situation will be materially improved and that the relief afforded will change the building situation into something nearer to the normal of other years, but no matter what the conditions, let the building industry maintain its interest and hope, and continue in a firm endeavor to speedily solve the problems.—"New York Real Estate Record."

Comparative Monthly Prices of Materials, 1917 and 1916.

	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.
Cement, Portland domestic, spot, per bbl.														
1917.	\$1.87	\$1.97	\$1.97	\$2.15	\$2.15	\$2.12	\$2.12	\$2.12	\$2.12	\$2.12	\$2.12	\$2.12	\$2.15	
1916.	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67		
Brick, Hudson River, Common, per M.														
1917.	8.00	9.00	9.75	10.00	10.00	10.00	9.50	8.25	8.00	8.00	8.00	8.00	9.00	
1916.	9.00	8.50	8.50	8.25	7.50	7.75	7.50	7.00	7.00	7.25	7.75	7.75	9.50	
Window Glass, 10x15 per box, 50 sq. ft.														
1917.	2.85	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.71	3.71	3.99	4.32	4.32	
1916.	2.10	2.28	2.28	2.28	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.85		
Lime, Eastern Common, per bbl.														
1917.	1.50	1.60	1.60	1.65	1.65	1.65	1.90	1.90	1.90	1.90	1.90	1.90	1.90	
1916.	1.35	1.55	1.55	1.55	1.55	1.55	1.35	1.45	1.50	1.50	1.50	1.50		
Yellow Pine, up to 12 inches, per M.														
1917.	30.00	30.00	30.00	30.00	33.00	33.00	40.00	40.00	40.00	40.00	40.00	40.00	52.00	
1916.	32.00	33.00	35.00	35.00	35.00	35.00	31.00	26.75	26.75	26.75	26.75	38.00		
Eastern Spruce Timber, wide, random.														
1917.	25.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	28.00	28.00	28.00	37.00	
1916.	25.00	25.00	25.00	25.00	25.00	25.00	23.00	23.00	23.00	23.00	23.00	24.00		
Penn. Hemlock, base price, per M.														
1917.	25.00	25.00	26.00	26.00	27.00	26.00	29.00	29.00	29.50	30.50	30.50	30.50	30.50	
1916.	23.00	23.00	23.50	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	25.00		
Structural Shapes, Pitts. (per ton)														
1917.	70.00	65.00	65.00	72.00	80.00	85.00	100.80	100.80	89.60	67.20	67.20	67.20	67.20	
1916.	40.00	38.00	45.00	50.00	50.00	52.00	50.00	50.00	50.00	54.00	56.00	60.00		
Copper per hundred pounds														
1917.	29.50	33.00	36.50	34.00	31.00	32.50	31.75	29.00	25.25	23.50	23.50	23.50	23.50	
1916.	22.80	25.37	27.12	27.50	28.50	28.00	26.50	26.25	28.00	28.50	28.50	34.50		

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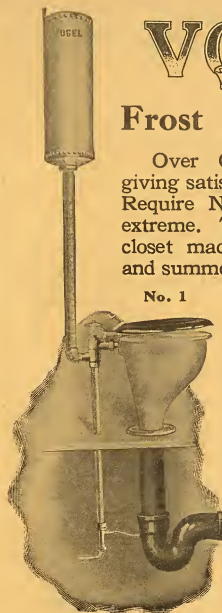
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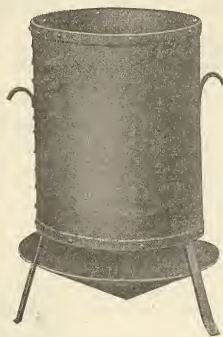
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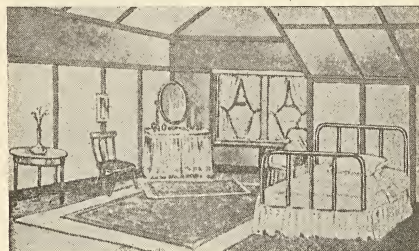
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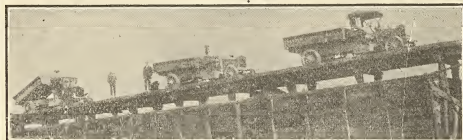
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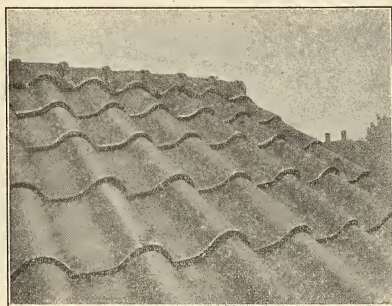
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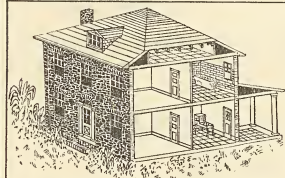


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PHILADELPHIA

Number 5

January 30, 1918

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As The Editor Sees It



ONE of the sanest suggestions that has yet appeared touching on the subject of the extraordinary demand for housing accommodations, bobbed up in a recent edition of the *Evening Ledger*, of Philadelphia. Under the caption, "Problem in Applied Patriotism," the *Ledger* remarks:

"Citizens could wish that our hotels, restaurants and trolley cars had the fecundity of rabbits. They might in that case be able to satisfy the demands of a population which has itself increased with such rapidity that congestion within the city rivals, if it does not equal, the freight congestion in New York.

"We do not attempt to estimate the number of people who have been attracted to this territory during the last few months by the amazing increase in industrial pursuits. We do know that the new ship-building plants alone will require from 200,000 to 250,000 additional expert workmen in the district from Bristol to Wilmington, which means a new population of not less than a million. Moreover, the indications are that the demand for skilled labor will be just as great after the war as it is now, drawing, however, from a larger supply. The new Philadelphia is not a temporary Philadelphia. It is a Philadelphia that has come to stay. The extravagant estimates of yesterday are to-morrow criticized as having lacked vision. The new population which we hoped to have in

the distant future we have now, and the influx continues.

* * *

WE are amazed sometimes at the inertia which fails to take advantage of the fact. Consider as an example of possibilities the Chestnut Street Opera House. It stood in the center of the city as a monument to a day that had passed. It was out of the theatre district, men said, although Keith's, almost opposite, seemed to keep its grip on a large clientele. Some gentleness of astuteness, however, concluded that a vacant Chestnut Street Opera House was ridiculous. It seemed to be on a proper site. Why not utilize it, particularly as the demand for amusement seemed to reflect the increase in population? Some paint, some refitting, attractions of merit, according to the taste of the day, and the rehabilitated playhouse comes into its own almost overnight! Too often a community bewails as liabilities possessions that a little common sense would convert into very real assets.

"We have an acute housing situation on our hands. The Government has concluded to solve its own problem by carrying through an enormous house-construction program for the benefit of employees at Hog Island. There are some thousands of other workmen for whom no organized provision of any sort is being made, so far as we can discover. There are many houses in the city which

have been virtually abandoned for years. Some of them earn no revenue whatever, while the value of others has seriously deteriorated. We believe that an energetic committee on the rehabilitation of old houses would add appreciably to the housing capacity of the city and at the same time offer accommodations considerably better than are now paid for in some quarters. There are, too, many enormous old houses of an era long passed, some of which have been converted into lodging houses and more of which are not being properly utilized. Many of them could with profit be converted into modern flats. The man of moderate income has to be provided for as well as the laborer.

* * *

A SCIENTIFIC survey of the possibilities for supplemental housing would, we believe, lead to positive results. The situation demands something more than private endeavor, although many men, supposedly shrewd, are overlooking opportunities to benefit their bank accounts and the community at the same time. Still the problem is a public problem, a municipal problem, and the municipal authorities ought to grapple with it.

"This thing of simply throwing up our hands and crying, 'There are not enough houses' does no good. There are literally tens of thousands of cubic feet of inclosed space now valueless for housing,

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but which by the expenditure of some money and brains could be converted into comfortable quarters. There are lofts that can be made into flats, there are houses that can be rehabilitated, there are some abandoned hotels that can again be put into use. Let us anticipate Government building by doing a little reconstruction work ourselves. The energy that pumped life into the Chestnut Street Opera House can take some hundreds of housing liabilities in Philadelphia and transform them into housing assets, to the greater good of the city as well as of the owners. Let us show some practical patriotism and back it with brains and money."

* * *

THIS has the right ring to it and is on the whole quite feasible. A great deal of the timidity observable in building circles is undeniably traceable to the selfishness of investors. There is plenty of improved ground awaiting speculative activity and I am told the prices at which it is held is in no sense prohibitive. The labor question, while acute, is by no means as bad as represented and the question of securing delivery of material in a manufacturing center like Philadelphia is practically negligible. There isn't a material used in modern building that is not to be had right here in Philadelphia. What, then, is the trouble? The trouble is with the investment corporations that make a business of financing ventures of this character. The investment corporation declines to advance money for new building on account of what it refers to as "the uncertainty of prevailing conditions." What is really feared is a new federal tax on mortgages. With a little more liberal and patriotic policy on the part of the investment concerns the speculative builder would be busy in a jiffy. Many of the operative builders with whom I have talked recently seemed to be fully alert to the tremendous demand that exists for houses. But, without financial backing what can they do?

The *Ledger* suggestion that old buildings be remodelled to meet the demand presents the same vexed question of capital again. From what source is to be derived the necessary funds? The average owner is without the necessary resources and the mortgaging companies are unwilling to advance money even for improvements upon property in what are known as depreciating zones. Patriotism is a highly laudable sentiment, but it won't build and it won't remodel unless backed by cash and credit. The builder stands ready to do his part. Where the prod requires to be applied is in the case of the fellow with the capital.

WHAT it is possible to do at the expense of a small outlay in making idle and unremunerative property pay is shown by certain recent efforts in that direction in Sixth Avenue, New York City. Arthur S. Pendleton, of the National Terra Cotta Society, discussing these improvements, remarks:

"With the announcement of the leasing of the remaining large department store on Sixth Avenue so long vacant, attention has been attracted to the problem of the future development of this thoroughfare, situated as it is between two of the most important business streets of the city, traversed at frequent intersections by an immense shopping public. It theoretically is a profitable situation of leasehold and trade, but through lack of foresight in keeping abreast of the times buildings have been permitted to fall into various stages of unsightly occupancy and architectural decay hardly believable. One has only to see this general dilapidated condition to realize that to a large extent buildings are not providing incomes for owners, returning little if anything over carrying charges.

It would seem as though this deplorable condition was in many instances due to a lack of knowledge of the value of respectable appearances and how little it would cost at present price levels to bring about an improvement which will not only turn these losses into income producing investments, but will, in many instances, pay the cost of alteration in the first year or two. The disinclination of owners to attempt anything that would suspend existing business does not hold here, for these remodeled fronts can be, in most instances, constructed with little, if any, interference at all to a continuation of trade.

* * *

A STRIKING example of what can be accomplished along the lines of remodeled fronts was shown in the *Record and Guide* of October 20, 1917, when a property, vacant for two years and carried at an annual loss of over \$1,700, was made through an investment of a little more than \$3,000 for an architectural terra cotta front of pleasing design, to rent for a period of twenty-one years at an annual rental of from \$5,000 for the first year up to \$10,000 with an option of renewal for a like period at a five per cent. increase.

"A similar operation is at 604 Sixth avenue. The front of the old building situated on these premises was removed and replaced by one of architectural terra cotta at a cost of approximately \$3,200.

"The recent activities of the Sixth Avenue Association, whose endeavor is a betterment of conditions, in their at-

tempts to have electroliers placed around the supporting columns of the elevated railroad might well be extended to a brightening up of building fronts so that the contrast of light and dinginess would not act against a patronage of the many stores.

* * *

HERE surely is an opportunity for this association to perform a praiseworthy civic duty, for these improvements are productive of more useful citizenship through increased earnings, higher valuations, greater taxable resources and a more sensible use of properties. They can be made, due to the small amount of money involved, without the assistance of loaning institutions, without embarrassing the Government in the least, without a consideration of high prices, for they may be accomplished by masonry construction and the use of architectural terra cotta, brick or stucco, in which prices have remained nearly normal with deliveries prompt.

"If a development of this sort were brought about it would add to our already embarrassingly restricted shopping area a large, conveniently accessible district wherein high class stores, offices, etc., could locate, which they now refuse to do, because the surroundings detract rather than attract trade.

"At this period of general construction depression, when all interests allied to the building industry are seeking means for improving conditions, it is eminently proper that all phases, both large and small, should be considered. Here at least is an opportunity to bring into the market what would in the aggregate amount to a large volume of work. Real estate agencies, above all, could exert a very strong influence along these lines."

* * *

THESE New York improvements, it will be noticed, were made with private capital. Assuming that private capital may be had here in Philadelphia to undertake the same order of enterprise, there can be no room to doubt that the field is ready and waiting. Thousands of properties throughout Philadelphia could be made to yield an excellent return under a program of renovation and intelligent management. It is a fact that several local real estate firms specializing in this order of activity have made big returns within the past few years, although their operations have done little more than scratch the surface of the field for this order of enterprise.

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EDITORIAL NOTES

It appears from careful investigation that in some localities and in many instances, building at just this time is a real patriotic service. In some cases it seems important to push both factory and housing facilities at the same time. In other instances existing plants have doubled the number of their employees by working extra shifts, and by additions to existing plants and new factory construction, have doubled the demand for homes. Thus it seems impossible to speed up production without considerable building of one kind or another.

Conservatism to an offending degree has pervaded the ranks of builders. If it were based on facts, showing the reasonableness of retarding building construction, there would be little argument. But, this conservatism has resulted in many instances, and is bound to have the same effect in the future, of not only retarding building, but of stopping it altogether.

Regardless of the present prices of materials, building should proceed. It is a well-known fact that in every large city and in all manufacturing communities more adequate housing facilities are needed. Especially is this true in industrial centers where ships, commodities and munitions needed by the Government and our allies are being made.

Phillip Hiss, New York architect and chairman of the sub-committee on housing of the Council of National Defense, recently stated that the shortage of workmen's accommodations is so acute in many industrial centers that work on Government war contracts is being seriously hampered from lack of workmen, the latter being unable to secure houses for themselves and their families.

Ample supplies of steel for all the Government's war needs were assured to the War Industries Board by representatives of the nation's largest steel mills. A different system of allocating orders was proposed. This would take into consideration idle capacity, the fuel supply and transportation conditions. In line with this suggestion, placing of orders hereafter will be centralized in the hands of J. L. Repogle, the Board's expert, and it is believed that deliveries will be expedited.

The great need of building material people to-day is to convince retailers that present prices cannot be lowered. Plant equipment has doubled, trebled and, in some instances, quadrupled in cost; common labor is higher to-day than ever before in the history of the country, and skilled labor, because of its shortage, is in great demand and is being paid wages in many instances equal to more than the profits made by building material retailers. Plants in all parts of the country have been

compelled to run with their full quota of workmen in order to operate a plant of, say, 20 cars capacity, when all they receive from the railroads is one or two cars a day. This naturally increases the cost of production of materials which are actually shipped.

Plans are being prepared privately for a large manufacturing plant to be located at 789 Warburton avenue, Yonkers, N. Y. The new structure will house the activities of the Associated Pharmacists, Inc., W. B. Cheatham, president, 93 Nassau street, Manhattan, owner. The proposed building will be constructed of reinforced concrete, two stories in height, with ground dimensions of approximately 200x375 feet. The cost is estimated to be in the neighborhood of \$400,000. According to the present schedule this operation will be ready for estimates on general contract about March 1, 1918. J. S. Joselyn will be in charge for the owners.

Iron and steel, of course, are high, but there is little indication of a general range of lower steel prices for some time to come. The Southern States have been given a strong industrial impetus through shipbuilding and other industrial plants due to war conditions and will require millions of dollars of supplies even after the war is terminated in order to carry out the industrial policies and ambitions of their respective sections.

The reconstruction period abroad will make unheard-of demands for American building materials. The great steel industries and other engineering and industrial organizations are to-day actually planning in detail for this coming period. They are already sending representatives abroad, to the Orient, to South America and to Europe. Already some classes of building materials demand at the seaboard a higher price for export, not only to the war zone in Europe, but to South America, than for domestic use, and this indicates the growing requirements for construction and building supplies abroad.

Attractive workmen's cottages have been built at Seavaren, N. J., constructed entirely of precast concrete slabs, where the industrial workmen's colony is being developed under the auspices of the Sage Foundation Homes Company and another model city, known as Morgan Park, at Duluth, Minn., is also constructed entirely of concrete.

Plans for housing the rapidly growing number of workers at the munition plants and shipbuilding yards are rapidly maturing. The General Chemical Company had plans prepared recently for fifty-two workmen's houses, to be erected on its property at Claymont, Del., and has awarded a contract for their

construction. The Housing Committee of the Board of Trade of Newark, N. J., is working out the details of a comprehensive scheme of housing development for that city, and it will not be long before some definite details will be decided upon. Other communities have also started plans for alleviating the intolerable conditions that exist in their vicinities, and it is expected that the movement will become general, as the need is imperative.

The business of the structural steel industry is practically at a standstill on account of the difficulties being experienced in obtaining adequate supplies of fuel. The transportation situation is also complicating affairs for the steel interests, and some of the plants have been forced to shut down for the time being. The demand for fabricated material to be used in the construction of buildings is extremely light and scattered, and the immediate prospects of improved conditions are not of the best. The Federal Government is to all intents and purposes the only factor in the consuming market, and this demand is almost exclusively for the requirements of war construction. The military work for the current year is rapidly being placed under contract, and the demands from this source will be materially increased as new awards are made. At the present time there is not sufficient private construction contemplated for immediate start to effect the market condition, although there have been a number of new structures recently planned, but owing to the weather and other deterrents it is likely that these projects will be held in abeyance for some time. The prices for fabricated materials are unchanged, and while the present Government figure is subject to revision after April 1, there is a feeling throughout the industry that the current prices will hold for the second quarter. Mill shipments of steel shapes are now quoted at 3.195c, New York.

The glass industry is almost at a standstill, and the outlook for the next few months is not of the brightest. Manufacturers of both plate and window glass are severely hampered by the difficulties being experienced in obtaining raw materials, labor, fuel and obtaining transportation for their finished product. Fortunately the demand is light on account of the dearth of building throughout the country, and up to the present writing there has been no change in the schedule of discounts. The statement has been made that only a very small percentage of the glass producing plants are in operation, owing to the adverse conditions, and the output of these has been seriously curtailed on account of the severe weather that has maintained for the last two weeks.

If your proposition is one that should appeal to architects, builders, building owners, decorators, material and supply concerns, "The Builders' Guide" is the right medium for your advertising and cannot fail to bring you profitable returns.

THE OPTIMISTIC NOTE

A New York Survey of Conditions in the Building Field that Looks on the Bright Side of a Situation More or Less Depressing

December was not as good a building month as it probably would have been if the cold were less severe and storms not so frequent. Starting off with a rather dull spirit in building circles, there came evidence of renewed activity in the trade about midway in the month and for a time conditions promised to bring forth a goodly volume of work. Then came repeated cold snaps, making operations difficult, particularly in the hauling of materials over the slippery, ice-covered streets. Even in the face of unfavorable weather conditions and other generally distressing factors, such as railroad congestion and labor scarcity, the month has totalled up fairly well, all things considered.

Furthermore, there is a more optimistic spirit abroad regarding the future of the trade under war conditions. One evidence of this is the active wholesale buying of brick to be stacked for the winter. The past few weeks have witnessed a greater tendency to accumulate supplies of brick and various other materials in anticipation of renewed activity of building in the near future.

During December the steadily increasing Government business has reached a point where it completely overshadows other operations, and with the enlarging scope of the nation's war plans, has arisen a call for miscellaneous Federal building and construction work that promises to outstrip anything the trade has hitherto imagined. Recently announcement was made by the Secretary of the Treasury that upwards of one billion dollars will be spent in building operations of every conceivable description contributing to first-class military efficiency. Included in these construction plans are the erection of storehouses, gunshops, hospitals, training camps, improvement of present military and naval bases, and land fortifications. Undoubted-

ly the new year will witness the most gigantic efforts toward thorough military and industrial preparedness ever conceived.

As a corollary to the Government's industrial war program arises the imminent necessity of added housing facilities for the tremendously increased number of workers in munition and supply factories. Realization of the urgent need for such building is spreading over the country and rapidly this work assumes the nature of a vital, and patriotic duty. Plans are under way for wholesale construction of workmen's houses in several large shipbuilding centers, besides other cities and towns manufacturing war supplies. As the new year progresses this movement promises a remarkable volume of work.

The material markets have been generally quiet for the past few weeks and prices have held steady at the levels established. Producers have been vexed with many troubles, such as labor shortage, strikes and shutdowns because of coal scarcity. Manufacturing costs continue to rise to higher points than in many years. Supplies of the basic materials in dealers' hands have been none too large, with stocks badly broken in many cases. Only an absence of active building demand has prevented a serious scarcity of supplies in and about the city. Transportation continues in a chaotic state, and many dealers have rushed to replenish their supplies of brick and lumber before the situation as regards shipping became further complicated by frozen water routes. Noticeable activity has recently occurred in wholesale buying and stacking of brick for the winter. Anticipations are that building is likely to revive considerably during the coming months, and that the spring will usher in a considerable volume of work which has been delayed by various adverse circumstances.—"New York Real Estate Record."

rather impulsive conclusion that the thoughtless admiration and imitation of the Roman style was producing a deleterious effect upon contemporary American art. In writing my "Medieval Architecture" I felt it almost a duty to do what I could to call attention to the prosaic character of Roman architecture.

The difference of opinion between Professor Hamlin and myself is, therefore, deep-seated. De gustibus non est disputandum. In matters of this sort there is no absolute proof to which one can have recourse. It is a question of feeling—really of creed—and as differences of religion are commonly the ones to which men cling most tenaciously, for which they are ready to sacrifice themselves and wrong others, so for the lover of art his esthetic creed is, perhaps the most deeply rooted part of his inner being, that which touches him most nearly when questioned by another.

The years that have passed since I wrote "Medieval Architecture" have brought changes in my point of view. Further study has proved to me that the deficiencies of contemporary art cannot altogether be laid at the door of Rome. Inspired by the same models, Palladio produced an architecture highly intellectual and McIntire an art infinitely refined. Very poor indeed has been much of the architecture imitated from the most exalted models of Greece and of the Middle Ages. The conclusion seems to be forced that for the production of good architecture it matters little what one copies, but it matters very vitally how.

As for Roman architecture itself, I have come to know it much better since the days when my first book was written. At that time my lips had barely touched the golden cup of Italian beauty. Since, the opportunity has come to linger long in Rome; to draw and photograph among the ruins of the Agro, to poetize with Carducci on the Aventine or in the Baths of Caracalla. Often as I have stood in the august presence of the Roman Forum it has never been without emotion. I have studied, with a feeling almost of homesickness, the engravings of the eighteenth century, stimulating my imagination to conceive of the city enhanced by the solitude and silence the modern age so discordantly breaks.

Yet I cannot with intellectual integrity say that my feelings toward Roman architecture have essentially changed in these twelve years. Visions of the magic of Rome, the cypresses of Tivoli, the sweeping lines of the Campagna, the snow-capped encircling mountains, the glorious color of the weathered brickwork, haunt my memory; yet I still see, as I did a decade ago, in Roman architecture emptiness, pomposity, vulgarity.

But very little of ancient Rome has come down to us intact. The charm which invests the Baths of Caracalla or the ruins of the Palatine to-day was assuredly never dreamed of by the builders. The picturesque masses, the colors, are the work of time—the most clever of artists. To conceive of these Roman buildings as they were, we must have recourse to archeology and modern restorations on paper. But do these imaginary reconstruc-

THE CASE AGAINST ROMAN ARCHITECTURE

In the course of an article published in the "Architectural Record" some months ago, my old teacher, Professor Hamlin, quoted with disapproval certain criticisms of Roman art from my youthful work on "Medieval Architecture." That the ideas in question are such as might readily find no favor with Professor Hamlin does not surprise me. It is entirely

orthodox to admire Roman architecture. Of all historic styles it presents the closest analogies with the architecture of the nineteenth century in America. It is the style upon which our modern architectural education is based. It is also, of all historic styles, evidently the least illustrative, the most material. Something over a decade ago I came to the

tions give an accurate idea of the esthetic effect of the architecture as it really was? May we not have missed some touch which possibly redeemed the lack of refinement? Imagine that all the scores of Wagner's *Nebelungen* Trilogy had been lost, and that some inferior musician should try to rewrite the work on the basis merely of the plot and a few snatches of melody. The result might easily be as meretricious as the restorations of Roman ruins. How can we prove that something like this may not have happened in the case of Rome? When we contrast the actual beauty of the ruins of the Forum with the monotony of the paper restorations, when we note in the latter the lack of balance in the mass, and the excessive symmetry in the details, how can we be certain that the ancient buildings may not have possessed some secret of beauty, some use of color or of asymmetry unknown to modern archeologists, but which redeemed a design that, only because of our lack of knowledge, seems lifeless and banal?

Future investigations may possibly show that Roman architecture was not as dull as it now appears. I fear, however, that this is exceedingly unlikely. The frescoes of Pompeii quickly dispel any illusion that the Romans possessed a sense for color. An abundance of Roman architectural detail has come down to us in good condition; and this, with very rare exceptions, is not such as to lead us to suppose that the Romans possessed sensitive esthetic perception in architectural art. Poor detail is not necessarily incompatible with good architecture (although the modern idea that good architecture must necessarily have had detail, is obviously false); nevertheless, the detail is apt to be eloquent of the spirit of the whole. When we find detail that is made commercially, mechanically, thoughtlessly, perfunctorily, we have the work, not of an artist, but of a materialist, and the larger features of the design are nearly certain to be permeated by the same qualities. The true artist may delight in the broad effect; he may take pleasure in producing that effect in simple materials, but he can never be satisfied with commercial detail. It is this lack of sensitiveness in Roman architecture, the absence of an artistic conscience, the readiness to subordinate all means to the end of an immediate effect, the obviousness, the lack of depth, with which I quarrel. There are two kinds of architecture, as there are two kinds of painting, of sculpture, and of literature: One is artistic, created for the joy of bringing into the world a beautiful thing—material compensation may or may not be given, but is secondary; the other is commercial, made primarily for expediency, for money, for fame. Roman art is of the commercial variety. Of that poetry which breathes so potently from the existing ruins, the same monuments, when new, must have been singularly deprived. They were opportunist structures, lacking in intellectual and emotional content.

There is a curious parallelism between the art, the literature and the life of Imperial Rome. I experience the same sensation of inexpressible weariness in studying Roman architecture and in reading of Roman ban-

quets, as, to cite one example among many, in the "Satyricon" of Petronius. What a bore these feasts, this endless over-eating and over-drinking must have been! How useless the magnificence, the throngs of slaves, the expert cooks able to prepare pork so that the entire company mistook it for duck! As Mr. Clapp renders Palazzeschi:

With luxury's glamor
the table is spread.
Exuberant flowers,
gold vases and silver . . .
The dishes before them
change hurriedly ever;
soups steaming and purees
delicious and pates
most tasty by thousands
From gardens forbidden
herbs skillfully seasoned,
woodcock and pheasant
pass by in the dishes
of these the unhappy;
most tender of green things
and sweetmeats the rarest,
incredible sweetmeats,
fruits red as a ruby,
wines too of all colors.

This effort, this expense of energy failed of its purpose, because there was lacking the spirit of joy. I suspect that the modern contadino takes far greater delight in his pasta and wine in the osteria that nestles among ruins of the Palatine, perhaps on the very site of the golden house where Trimalchio gloried and drank deep. It is evident that the Romans themselves grew tired of the unending series of gluttonous revels. Petronius doubtless exaggerates the grossness and stupidity of Roman society; he nevertheless was an eye-witness of its excesses, and his testimony carries weight. This is how he describes an episode at a banquet, when the impossible Trimalchio calls his architect (lapidarius) Habinnas and orders his tomb:

"Trimalchio then ordered a copy of his will to be brought, and this he read from one end to the other, while the whole company heaved sighs. Then looking at Habinnas, he said, 'How about it, my friend? Have you built my tomb as I ordered? I ask you particularly to put at the foot of my statue my little dog, crows and a box of perfumery. . . . Moreover, let the tomb measure one hundred by two hundred feet; and let there be planted about it all sorts of fruit trees and many vines, for it would be absurd that I should be said to have cultivated my lands while I lived; but neglected those where I must inhabit so long. Therefore I should like to have this inscription placed on the tomb:

"This Monument Does Not Belong to My Heirs.

"Furthermore, I shall take care in my will that no one injures me after my death; for I shall appoint one of my freedmen to guard my tomb, to see that no one commits there any nuisance. I charge you also, Habinnas, to sculpture on my tomb ships under full sail (this in reference to the sources of Trimalchio's wealth), and my portrait is to show me

sitting on a tribunal with five golden rings on my fingers, giving silver coins to the populace out of a sack; for you know well I have given a public banquet and two pieces of money to all who came. You may therefore also represent, if you please, the dining hall and all the people eating with pleasure. At my right you will place a statue of my wife Fortunata holding a dove in one hand and leading a dog on a leash with the other; and you will put there also my dear Cicaron and great jars of wine well corked up. One only of these shall be broken, and a child shall be weeping over it. In the middle of the sundial shall be an inscription so placed that any one reading the hour must perforce see my name. As for the epitaph, see if you think this is suitable:

"Caius Pompeius Trimalchio, the Patron of Art, rests here. He never wished to hear the discourse of philosophers. May thou do the same . . .

"Thanks to Mercury, I have built this palace of mine in which we now are; as you know it was a house, but now it is imposing as a temple; it has four drawing rooms, twenty bed chambers, two marble porticoes, a tower above in which I myself sleep, apartments for my wife, an excellent porter's lodge and slaves' quarters able to accommodate a thousand persons."

The satirist has painted for us most admirably the spirit, not only of Imperial Roman society, but of Imperial Roman art. Indeed of the inferiority of that art Petronius himself is well aware. Farther on in the same satire he explicitly complains:

"The fine arts have perished, and especially painting has left of itself only the least traces. We do not create art, but only criticize that of antiquity" (i. e., Greece).

It would obviously be untrue to maintain that all Roman architecture lacks artistic vitality. Probably no generality is ever strictly true. The stucco reliefs of certain tombs on the Via Latina were modeled by a man or men who felt beauty, and who were singularly successful in transmitting that impression by a few powerful strokes on the wet plaster. Occasionally, in the carved ornament, as in the arch of St. Remi, a real artist showed what life could be given to a traditional motive. Such flashes, however, only deepen the general impression of perfunctoriness in Roman work. Notwithstanding the variety of type, the skill in planning and engineering, the varied materials, the colossal scale (perhaps even because of the latter), the art as a whole is joyless, like a painful task performed more or less conscientiously, without enthusiasm. One feels intuitively that the builders cared little for the selfish Caesars in whose honor they erected triumphal arches and palaces; that they cared little for the populace, to shelter whom they built unending colonnades on the streets and forums; and, least of all, for the temples to strange, cold gods. The yoke of the taskmaster lies heavy upon their arms, as it lies upon the arm of the worker in a modern factory.

(Continued on Page 77.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Store (alts. and add.) into Residence, 152 Green street, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, N. Cotler, on premises. Brick, 2-story addition, 12x18 feet, slag roof, mill work, hot air heating, plumbing brick front, brownstone trim. Plans about completed. Owner will take bids in about one week.

Residence (alts. and add.), Overbrook, Philadelphia. Architects, Druckenmiller & Williams, 1537 Chestnut street, Philadelphia. Owner, Ira Vaughn, Merion, Pa. Stone, consists of general interior alterations. Plans in progress.

Store House, Z. B. 6 (add.), Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Edwin J. Benter, Frankford Arsenal. Steel, iron and brick, 1 story, 60x35 feet, tin roof, cement floors, wire work. Lowest Bidder, Wm. R. Dougherty, 1610 Sansom street, \$21,100.

Store and Apartments (alts.), 1702-04 Dauphin street, Philadelphia. Architect, Ed. F. Bertollett, 1614 Cherry street, Philadelphia. Owner, Nathan Berg, Colorado and West Dauphin streets, Philadelphia. Brick and stone, 2 and 3 stories, 30x48 feet, tin and tile roof, concrete floors, tile and marble work, rolled steel sash, metal lath, metal ceilings, waterproofing, ornamental iron work. Architect taking bids, due as soon as possible. Smith-Hardican Co., 1606 Cherry street; Lam Building Co., 1001 Wood street; John N. Gill & Co., Otis Building; Walker R. Potts, 1026 Wood street, are figuring.

Store Building (alts.), northeast corner of Eleventh and Filbert streets. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, Harry C. Kahn, on premises. Consists of exterior and interior alterations, parquet floors, tile and marble work, metal bulks. Plans about completed. Architect will take bids in about a week.

Residences (14), Fifty-first and Springfield avenue, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Steltz & Maloney, Sixty-seventh and Elmwood avenue, Philadelphia. Brick, stone foundations, 2 stories, 18x50 feet, slag roof, hot water heating, combination lighting, tile and marble work, hardwood floors, garage privileges. Plans completed. Architect is taking sub-bids.

Car Repair Shop (10 Bays), Thirty-sixth and Jackson streets, \$30,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Iron and brick, 1 story, 88x150 feet, asbestos roof, cement floors, rolled steel sash and skylights, fire doors (heating and lighting reserved). Owners taking bids, due as soon as possible. F. A. Havens & Co., 845 North Nineteenth street; Metzger & Fisher, Otis Building, and Evans Const. Co., 9 South Eighteenth street, additional bidders.

Store Building, 655 North Broad street, Philadelphia. Architect, J. Ethan Fieldstein, 308 Penfield Building; Owners, Levick & Waldow,

707 Walnut street, Philadelphia. Brick, stone and terra cotta, stone foundations, 2 stories, 18x100 feet, slag roof, steam heat, electric light, tile work, hollow metal skylights, metal bulks, ornamental iron work, cement and pine floors, metal lath, metal ceilings. Architect taking bids, due as soon as possible. Evans Const. Co., 9 South Eighteenth street, additional bidder.

Storage Building (alts.), No. 141, Spec. No. 2042, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, Public Works Department, care of Pur. Dept., Navy Yard, Philadelphia. Frame, 1 story, 24x58 feet, ready roofing, maple floors, cement work, painting. Lowest bidders: Hogg Const. Co., 1634 Sansom street, \$1,071, 30 days; McCloskey & Bahls, 1620 Thompson street, \$1,142, 15 days.

Auto Show Room, 1712-14 Race street, Philadelphia. Architect, Frederick Webber, 1421 Chestnut street, Philadelphia. Owner, J. Walter Rosenberg, Broad and Walnut streets, Philadelphia. Reinforced concrete, brick, terra cotta and stone, 2 stories and mezzanine floor, 40x130 feet, slag roof, stone foundations, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal sash and skylights, fire doors, flush bulks, iron stairs, ornamental iron work, cement, oak and mosaic floors, metal lath, wire work. Architect has received bids.

Store Building (alts.), southeast corner of Twelfth and Vine streets, Philadelphia. Architects, Andrew J. Sauer & Co., 905 Chestnut street, Philadelphia. Owner, Wm. H. Sterthal, on premises. Brick and steel work, metal bulks, electric lighting, tile work, tile and maple floors, metal ceilings. Architects have received bids.

General Storehouse, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Frankford Arsenal, Philadelphia. Brick and concrete, 3 stories, 70x224 feet, slate roof, maple floors, hollow tile, rolled steel sash and skylights, fire doors, safety treads, roof ventilators, ornamental iron work (heating and lighting reserved). Lowest bids submitted by: Wm. R. Dougherty, 1610 Sansom street, Item No. 1, \$139,000, 150 days; No. 2, \$135,000, 150 days. W. W. Anstine & Co., 1218 Filbert street, Item No. 1, \$138,860, 275 days; No. 2, \$130,985, 275 days; bridge, \$3,000 additional.

Lodge and Stable (alts.), Wissinoming Park, Frankford. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, Department of Public Works, George E. Datesman, Director, City Hall, Philadelphia. Brick, 1 story, tin roof, general alterations to buildings and ground. Lowest bidder, E. C. Durell, 1713 North Twenty-fourth street, \$1,771.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Store Building (alts.), 1006-08 Market street, Philadelphia. Architects, Wm. Steele & Sons Co., 30 South Fifteenth street, Philadelphia. Owner, Samuel Snellenburg, Eleventh and Market streets, Philadelphia. Consists of general alterations, tile and marble work, hollow metal sash, flush bulks, tile and cement floors, metal lath, safety treads, metal ceilings, waterproofing. Contract awarded to Lam Building Co., 1001 Wood street.

Garage and Shop, Thirty-second and Ludlow streets, Philadelphia, \$12,000. Architect, private plans. Owners, Twentieth Century Storage and Warehouse Co., 3120 Market street. Brick and reinforced concrete, 1 story, 50x168 feet, slag roof, steam heating, electric lighting, cement floors, rolled steel sash and skylights, fire doors. Contract awarded to George & Borst, 277 South Eleventh street, Philadelphia.

Store (add.), 25 South Eighteenth street, \$4,000. Architect, private plans. Owner, John C. Mellon, Haverford, Pa. Brick, 2 stories, 20x25 feet, slag roof, stone foundations, steam

heating, electric lighting maple floors. Contract awarded to George C. Dougherty, 1725 Ludlow street.

Store Building (add.), Fifth and Cherry streets, Philadelphia, \$3,000. Architect, private plans. Owners, Wm. H. Horstmann Co., on premises. Brick, 1 story, 14x55 feet, slag roof, maple floors. Contract awarded to Frank English, 1608 North Carlisle street.

Incendiary Ammunition Loading Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Edwin J. Benter, Frankford Arsenal, Philadelphia. Steel and sheet metal, 1 story, 40x24 feet, cement floors. Contract awarded to Wm. Steele & Sons Co., 30 South Fifteenth street, Philadelphia.

Garage, 1414-22 North Thirty-first street, Philadelphia, \$15,000. Architect, private plans. Owners, Beam-Fletcher Corp., Thirty-first and Master streets, Philadelphia. Mill work, plumbing, fire repairs, slag roof, cement floors, electric lighting. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

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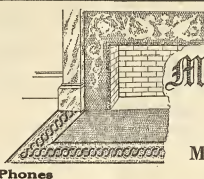
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AWARDING A CONTRACT

Warehouse (alts. and add.), 235 Dock street, Philadelphia, \$85,000. Architects, Pouckert & Wunder, 310 Chestnut street, Philadelphia. Owner, Louis B. Fortner, 36 Strawberry st., Philadelphia. Brick and concrete, terra cotta trim, 4 stories, 25x100 feet, slag roof, new front, steam heating, electric lighting, tile work, hollow metal sash and skylights, fire doors, cement floors, metal lath, elevator, roof ventilators. Contract awarded to P. Haibach Cont. Co., Twenty-sixth and Thompson streets, Philadelphia.

Store Building (int. alts.), 1033 Walnut street, Philadelphia. Architect, Frank V. Nickels, 4400 Manayunk avenue, Philadelphia. Owner, Wm. O'Brien, 1087 Walnut street, Philadelphia. Brick, 4 stories, slag roof, stone foundations, hot water heating, tile work, hollow metal skylights, ornamental iron work (heating, plumbing and lighting reserved). Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Factory (alt. and add.), buildings Nos. 21 and 23, Second and Erie avenue, Philadelphia, \$15,000. Architect, private plans. Owners, Thos. Potter Sons & Co., on premises. Brick and fire repairs, 2nd story addition, 17x48 feet, slag roof (to be used for coaling house). Contract awarded to Harry Brooklehurst, 512 West Norris street, Philadelphia.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggio give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!



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PENNSYLVANIA

Construction News

Residence and Garage, Merion, Pa. Architects, Druckenmiller & Williams, 1537 Chestnut street, Philadelphia. Owner, Charles P. Vaughn, 5911 Overbrook avenue, Philadelphia. Brick, plastered, new porches, tile roof (vapor heating reserved). Alfred James, Bala, Pa., is taking sub-bids.

Punch Shop, Office Building, and Joiner Shop, Chester, Pa. Architect, private plans. Owners, Chester Shipbuilding Co., Finance Building, Philadelphia. Steel, galvanized iron and concrete, rolled steel skylights, rolled steel sash. Plans in progress. Too early for details.

Residences and Apartments (200), Chester, Pa. Architect, private plans. Owners, Chester Shipbuilding Co., Finance Building, Philadelphia. Brick, 2 stories. Plans in progress. Too early for details.

Nurses' Home, Phillipsburg, Center Co., Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Phillipsburg Hospital, Phillipsburg, Center County, Pa. Brick, 2½ stories, 30x60 feet, slag roof, pine floors. Plans about completed. Will be ready for bids in about ten days.

Store Building (alts.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owners, Huntingdon Valley Farms, Meadowbrook, Pa. Stone, 2 stories, interior alterations, new dining room, bath room, etc., tin roof, hardwood floors, steam heating, electric lighting tile and marble work. Architect taking bids, due January 30th. Specht & Sperry, Heed Building; W. John Stevens, Inc., Wyncoote, Pa.; A. D. Griffith, Jenkintown, Pa.; Howard S. Amey, Ambler, Pa.; Pesmire Bros., Willow Grove, Pa.; Harry Murphy, Willow Grove, Pa., and E. D. Lever, Abington, Pa., are figuring.

Garage and Service Station, West Chestnut street, Lancaster, Pa. Architects, Estep & Shaub, Lancaster, Pa. Owner, Mrs. Caroline H. Steinman, care of architects. Brick, 2 stories, 60x80 feet, slag roof, steam heating, electric lighting, hollow metal sash, fire doors, concrete floors. Plans in progress.

Office Building, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owners, York Tack and Nail Works, York, Pa. Brick, 1 story, 44x27 feet, slate roof, wood floors, steam heating, electric lighting. Lowest bidder, Samuel Glatgelter, York, Pa.

Residences (15), Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, R. H. Scroggins & Son, Chester, Pa. Brick and stucco, 2 stories, 20x28½ feet, slag roof, stone foundations, electric lighting, hot air heating, composition roof. Owners are taking sub-bids.

Infirmary, Spring City, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, Pennsylvania State Home for Feeble Minded Epileptics, Spring City, Pa. Brick and stone, 2 stories, 98x40 feet, slag and slate roof, wood floors, steam heating, electric lighting, tile and terrazzo work, rolled steel sash, fire doors. Plans in progress. Will take bids in about one month.

Residence, Jenkintown, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner's name withheld. Stone, 2½ stories. Preliminary sketches being drawn.

Club House (alt. and add.), Orville, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Waist, Silk Suit and Children's Dressmakers' Union, 40 North Ninth street, Philadelphia. Brick and stucco, 3 stories, 45x80 feet, slag roof, hot water

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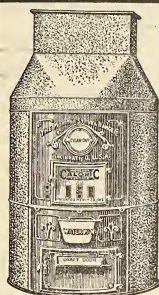
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Building, Philadelphia.

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NEW JERSEY Construction News

Infirmity Building, Hightstown, N. J. Archi-
tect, John F. Jackson, 1326 Broadway, New
York City. Owners, Peddie Institute, Hights-
town, N. J. Brick, reinforced concrete, stone
and terra cotta, 2½ stories and basement,
53x29 feet, tin and slate roof, steam heating,
electric lighting, tile and marble work, cement
and maple floors, hollow tile, metal lath, iron
stairs, ornamenta iron work, dampproofing,
wire work. Architect taking revised bids, due
February 5th. Hughes-Poukrod Co., Common-
wealth Building, Philadelphia, are figuring.

Residences, Camden, N. J. Architect, private
plans. Owners, New York Shipbuilding
Co., Camden, N. J. Brick, 2 stories. Work com-
templated.

Club Building, Sixth and Walnut streets,
Camden, N. J. Architect, private plans. Own-
ers, Y. M. H. A. of Camden, on premises.
Brick and concrete, 2½ stories, 50x90 feet,
slag roof, concrete and maple floors, electric
lighting, tile work, fire escapes. Owners are
taking bids.

School Building, Glassboro, N. J. Architects,

Moffett & Stewart, Inc., 30 North Third street,
Camden, N. J. Owners, Board of Education,
Glassboro Township, N. J. Brick, stone and
reinforced concrete, 2½ stories, 70x146 feet,
slag roof (steam heating, electric lighting,
plumbing and furniture reserved), rolled steel
sash, wood and composition floors, metal lath,
safety treads, roof ventilators, fire and kala-
main doors, dampproofing, ornamental iron
work. Architects taking bids, due in about
ten days. Same list of contractors figuring.

Power House and Signal Tower, Skillman,
N. J., \$40,000. Architect, Samuel T. Wagner,
Reading Terminal, Philadelphia. Owners, Phila-
delphia & Reading Railroad Co., Twelfth and
Market streets, Philadelphia. Concrete, brick
and steel, 2 stories, 20x15 feet and 1 story
and basement, 13x33 feet, slate and asbestos
roof, hot water heating, electric lighting, roll-
ed steel sash, fire and Almet doors, cement
floors, iron stairs, ornamental iron work (pow-
er house lighting). Contract awarded to A.
L. Carhart, Hale Building, Philadelphia.

DELAWARE Construction News

Store and Apartments (alt. and add.), 403-05
Delaware avenue, Wilmington, Del. Architect,
R. C. Tindall, 914 Orange street, Wilmington,
Del. Owner, Stephen L. McKee, on premises.
Brick, 3 stories, general interior alterations,
flush bulks. Plans in progress.

Apartments (alt. and add.), Ninth and Or-
ange streets, Wilmington, Del. Architect, E.
C. May, Dupont Building, Wilmington, Del.
Owner, James T. Chandler, on premises. Brick
and stucco, 2 stories, pine floors, electric light-
ing extension. Plans in progress.

Apartment House (alt. and add.), Wilming-
ton, Del. Architect, J. J. Kennedy, Ford Build-
ing, Wilmington, Del. Owner's name withheld.
Brick, 3 stories, 50x60 feet, tin roof, hot water
heating, electric lighting, tile work, pine
floors. Plans in progress.

Residences (4), Wilmington, Del. Archi-
tect, J. J. Kennedy, Ford Building, Wilming-
ton, Del. Owner's name withheld. Brick, 2½
stories, 18x60 feet, composition roof, hot water
heating, electric and gas lighting, tile work,
hardwood and yellow pine floors. Plans in
progress.

Bank (alt.), Sixth and Market streets, Wil-

mington, Del. Architects, Brown & Whiteside,
Dupont Building, Wilmington, Del. Owners,
Wilmington Bank, Sixth and Market streets,
Wilmington, Del. Consists of general altera-
tions, plumbing fixtures, mill work. Contract
awarded to H. D. Haddock & Co., Wilmington,
Del.

Rest Room and Toilet Building, Wilmington,
Del. Architects, Brown & Whiteside, Dupont
Building, Wilmington, Del. Owners, Wilming-
ton Mills, Wilmington, Del. Brick, 1 story,
40x15 feet, slag roof cement floors, tile and
marble work (heating and lighting reserved).
Contract awarded to A. S. Reed & Bro., Wil-
mington, Del.

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Miscellaneous Construction News

Storage Building and Warehouse, Pocomoke City, Md. Architects, Duhring, Okie & Ziegler, Bailey Building, Philadelphia. Owner, Milton L. Veasey, Pocomoke, City, Md. Brick, steel (slow burning), 2 and 3 stories, 160x200 feet, slag roof, cement floors. Plans in progress. Too early for details.

Boiler Makers' Shop No. 2763, Washington, D. C. Architect, private plans. Owners, U. S. Government, care of A. L. Parsons, Acting Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, fram and brick, 1 story, 100x200 feet, asbestos roof, steam heating, electric lighting, rolled steel sash, fire doors, maple and cement floors, hollow tile, metal lath, dampproofing, ornamental iron work. Owners have received bids.

Maryland Construction News

Canning Plant, Carey and Warren streets, Baltimore, Md. Architects, Owens & Sisco, Continental Building, Baltimore, Md. Owners, C. G. Lammus Co., 415 West Camden st., Baltimore, Md. Reinforced concrete, brick and steel, 2 stories, 100x300 feet, slag roof. Plans in progress. Too early for details.

Shipbuilding Plant (fire repairs), Locust Point, Baltimore, Md., \$75,000. Architect, private plans. Owners, H. E. Crook Co., care of Howard E. Crook, president, 28 Light street, Baltimore, Md. Frame, galvanized iron, 1 story, composition and slag roof, cement floors, electric lighting, general rebuilding of building damaged by fire. Owners will sublet.

Abattoir and Cold Storage, Tank House, Power House and Garage, Sixth street, south of Wilkens avenue, Baltimore, Md. Architects, Gardner & Lindberg, Marquette Building, Chicago, Ill. Owners, Corkran, Hill & Co., 221-7 South Howard street, Baltimore, Md. Reinforced concrete, brick and stone, 3 stories, 90x220 feet, composition roof, direct and indirect heating, electric lighting, steel sash, metal doors, rolled steel sash and skylights, roof ventilators, hollow tile, ornamental iron work, fire escapes, electric elevators. Plans about completed. Architects will be ready for bids in about three weeks.

Apartment House, Roland avenue and University Parkway, Baltimore, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore, Md. Owner, Harold C. Hunt, 4 Queen Anne's Road, Baltimore, Md. Brick, steel and stucco, 3 stories, slate roof, electric lighting, reinforced concrete work, tile and marble work, dumb waiters, plastering, painting, plumbing, refrigerators. Revised plans about completed. Architects will take bids in about two weeks.

Home, 114 West Franklin street, Baltimore, Md. Architect, private plans. Owners, Sodality Union, care of Miss K. Z. Donnellan, 345 North Charles street, Baltimore, Md. Consists of general interior alterations, carpentry, electric lighting, plumbing, new heating system and painting. Plans in progress.

Nurses' Home, Calvert and Pleasant sts., Baltimore, Md., \$200,000. Architect, Frank J. Baldwin, 330 North Charles street, Baltimore, Md. Owners, Mercy Hospital care of Sister

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Hospital, Base No. 7, Garret Traet, between York Road and Charles-Street avenue, Baltimore, Md. Architect, private plans. Owners, U. S. Government, care of War Department, Washington, D. C. Brick, concrete and steel, will include 7 buildings, consisting of hospital buildings, officers' quarters, dormitories, office building and garage for storing ambu-

lances. Plans in progress. Too early for details.

Garage and Experimental Building, East Fayette street, Highlandtown, Md. Architect, Thos. Bond Owings, 347 North Charles street, Baltimore, Md. Owners, Continental Can Co., on premises. Brick, concrete, steel and frame, 2 stories, 85x100 feet, slag roof, cement floors, steam heating, electric lighting, skylights, ventilators, plastering and painting (heating, lighting, elevators and plumbing reserved). Architect taking bids, due January 31st. The following are figuring: W. E. Harn Co., 213 North Calvert street; Cowan Building, 106 West Madison street; B. F. Bennett Building Co., 123 South Howard street; H. D. Watts Co., Garrett Building, Baltimore, Md.

MARYLAND

Contracts Awarded

Automobile Assembling Plant, St. Helena, Baltimore, Md., \$1,500,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Will consist of main building, 480x497 feet; storage building, 136x720 feet; officers' quarters (4), barracks (32), mess halls (8), administration building, lavatories (8), post exchange (1), medical infirmary (1), guard house (1), Quartermasters' storehouse (1), bakery (1), garage (1), fire engine house, truck crating shop, saw mill. Contract awarded to Edw. O. Scheidenhelm & Co., Fifth avenue and Twenty-sixth street, Chicago, Ill.

Store (alts.), 110 West Lexington street, Baltimore, Md. Architect, private plans. Owner, George Gunther-Estate, Gunther Building, Baltimore, Md. Consists of interior and exterior alterations. Contract awarded to John E. Marshall & Sons, 121 Mercer street,

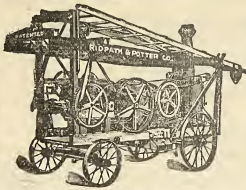
Baltimore, Md.

Garage, rear of 2543 Brookfield avenue, Baltimore, Md. Architect, private plans. Owner, Paul F. Obrecht, 1123 Light street, Baltimore, Md. Brick, 1 story, 25x43 feet, slag roof, cement floor, electric lighting. Contract awarded to Jos. Schamberger & Son, 1 North Duncanson street, Baltimore, Md.

Garage, 217 West Monument street, Baltimore, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore, Md. Brick and concrete, 1 story, 18x25 feet, slag roof, electric lighting. Contract awarded to W. E. Harn & Co., 213 North Calvert street, Baltimore, Md.

Car Barn (alts.), Lafayette avenue and Charles street, Baltimore, Md., \$2,000. Architect, Otto G. Simonson, Maryland Casualty Tower, Baltimore, Md. Owners, United Railways Co., Continental Building, Baltimore, Md. Consists of interior alterations. Contract

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awarded to C. E. Stubbs, Equitable Building, Baltimore, Md.

Bridge, across Marion street, Baltimore, Md. Architects, Smith & May, 1131 Calvert Building, Baltimore, Md. Owners, Eisenberg's Underselling Store, 213 West Lexington street, Baltimore, Md. Reinforced concrete and steel. Contract awarded to C. L. Stoekhausen Co., Gay and Water streets, Baltimore, Md.

Dwellings (7) and Garage, Oak street, near Twenty-ninth street, Baltimore, Md. Architect, Geo. R. Morris, Title Building, Baltimore, Md. Owners, University Homes Co., Title Building, Baltimore, Md. Brick, 3 stories, slate and tin roofs, hot water heating, combination lighting, plastering, tile work, hardwood floors. Owners will sub-let.

Gas Tank Foundation, Spring Hardens, Baltimore, Md., \$30,000. Architect, private plans. Owners, Consolidated Gas, Electric Light and Power Co., Lexington street building, Baltimore, Md. Concrete and steel, 234 feet in

diameter. Contract awarded to B. F. Bennett Building Co., 123 South Howard street, Baltimore, Md.

Warehouse, South Luzerne street, Baltimore, Md., \$8,000. Architect, private plans. Owners, Samuel Robinson & Co., on premises. Brick, concrete and steel, 3 stories, 45x75 feet, slag roof, electric lighting, steam heating. Contract awarded to Lorenz Schoenlein & Son, 21 Gunther Building, Baltimore, Md.

Warehouse, Bowie, Md., \$2,000. Architect, private plans. Owners, Pennsylvania Railroad Co., Central Station, Baltimore, Md. Frame, 1 story, composition roof, brick underpinnings. Contract awarded to M. C. Davis, 902 West Thirty-sixth street, Baltimore, Md.

Filling Plant for Gas Bombs, Edgewood, Md., \$4,000,000. Architect, private plans. Owners, U. S. Government, care of War Department, Ordnance Division, Washington, D. C. Consists of a group of 48 buildings. Contract awarded to Mellon & Stuart, Munsey Building, Washington, D. C.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwellings (9), Elmwood and Sixty-sixth street, \$21,600. Steltz & Maloney (O and C), 1208 Chestnut street. Stone and brick, 2 stories, 16x32 feet, slag roof, hot water heating.

Shop and Garage, Thirty-second and Ludlow streets, \$12,000. Twentieth Century Storage Warehouse Co. (O), 3120 Market street. George & Borst (C), 277 South Eleventh street. Brick, 1 story, 50x168 feet, reinforced concrete, slag roof.

Store, 25 South Eighteenth street, \$4,000. John C. Mellon (O). Haverford, Pa. George C. Dougherty (C), 1725 Ludlow street. Brick, 2 stories, 20x25 feet, slag roof, steam heating.

Church, Front and Northeast Boulevard, \$5,800. Bishop Rhinelander (O), Philadel-

phia. Wm. C. Wright (C), 22 Harvey street. Frame, 1 story, 33x66 feet, shingle roof.

Restaurant, 124 South Thirteenth street, \$6,000. J. G. Patton (O), Pennsylvania Building. James H. Wilson (C), 1717 Moravian street. Interior alterations and one-story addition. brick, 5x50 feet.

Engine House and Machine Shop, American and Erie avenue, \$300,000. Philadelphia and Reading R. R. (O), Twelfth and Market sts. Wm. Steel Sons Co. (C), 30 South Fifteenth street. Reinforced concrete and brick, 1 story, 109x154 feet, and 1 story, 130x216 feet, slag and asbestos roof.

Garages (4), Pearl street, south of Thirty-sixth street, \$1,600. James D. Winchell (O), Seventeenth and Sansom streets. LeRoy K.

Smith (C), Forty-first and Chester avenue. Brick, 1 story, 11x20 feet, slag roof.

Alterations and Additions

Apartment, 3601 Powelton avenue, \$7,000. James D. Winchell (O), Seventeenth and Sansom streets. LeRoy K. Smith (C), Forty-first and Chester avenue. Brick, 2-story rear addition, 15x12 feet, slag roof and hot water heating.

Garage, 1414-22 North Thirty-first street, \$15,000. Beam-Fletcher Corp. (O), Thirty-first above Market street. John N. Gill Co. (C), 1201 Otis Building. Fire damage.

Store Building, Fifth and Cherry streets, \$3,000. W. H. Hartman Co. (O), on premises. Fred English (C), 1608 North Carlisle street. Brick, 1 story, 14x85 feet, slag roof.

Store and Rooming House, 1033 Walnut st., \$1,900. Wm. J. O'Brien (O and C), 1037 Walnut street. Plastering, alterations and bath room.

School, Fifth and Snyder avenue, \$570. Board of Education (O), Philadelphia. E. Y. Funk (C), 1502 North Twenty-first street. Fire repair damage.

Shed, 3216 East Thompson street, \$350. S. Tumisevski (O), on premises. S. Gregoryck (C), 5008 Glenlock. Fire damage.

Factory, Second and Erie avenue, \$15,000. Thos. Potter Sons & Co. (O), on premises. Harry Brockelhurst (C), 512 West Norris st. Brick, 2nd story addition, 17x48 feet, building No. 23; fire repairs to building No. 21.

Water Storage, Woodland avenue and Sixtieth street, \$10,000. J. G. Brill Co. (O), on premises. Pittsburgh Des Moines Steel Co. (C), 50 Church street, New York. 100,000 gallon steel tank.

Bakery and Dwelling, 412 South Broad st., \$450. Mrs. J. Highland (O), on premises. Otto Malz & Son (C), 2108 North Lawrence street. Alterations to oven.

Garage, 3222 Columbia avenue, \$500. Louis Kravitz (O), 3220 Cumberland street. Sol Shestack, 322 Dickinson street. Alterations, cement floor.

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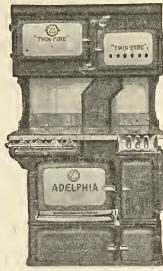
(Continued from Page 71.)

It is by this token, perhaps, that the failure of Roman architecture is most clearly proved. For the essence of all great art is joy; the joy of grandeur, the joy of poetry, the joy of gloom, the joy of tears perhaps, but always joy. The genius imbues the object of his art with a spark of this divine joy, so that it may awaken in others the same, or a kindred, emotion. Many may feel such emotion without the ability to express it; many may have the ability for expression without feeling the joy to communicate. Such will endeavor in vain to simulate or force an emotion which is not genuine. They may succeed in deluding even the keenest critics for a while, but the eternal difference of value abides unchanged, unchangeable. If there be not joy in creation, all is in vain.

The truth of this may be illustrated in a sister art. If the "Virgin of the Rocks" at London were an original by Leonardo da Vinci, its importance would be incalculable. If it is a copy of Leonardo's painting by his pupil, Ambrogio da Predis, all the world will esteem it much less. In either case the picture is intrinsically the same. The keenest critics have been proved quite capable of mistaking the copy for the original. Is the original prized and the copy depreciated because we are such fools as to be guided in our artistic preferences by a name? I think not. The Paris original possesses an intrinsic value which the London copy lacks. The absolute-ness of this value continues none the less to exist, even if it be mistaken by critics who happen to have gone astray. The value of an original lies in the fact that it communicates to us directly the conception—the impression of joy—of the creator; whereas in a copy the impression is almost necessarily blunted by transmission through another hand.

I have often heard architects, in speaking of some project, use the phrase, "great fun." In fact, the words have almost become current architectural slang. They are vastly significant. They express simply, and without pretension, that joy which is equaled by no other, the joy of creative work. The element of joyousness is thus not altogether lacking in our modern architecture. It is to be regretted that it does not more often extend downward from the architect to his office force, and that it is frequently crushed out entirely by the combined forces of steam heat, plumbing, and labor unions.

There remains, it is true, a deep mystery in Roman architecture. If we grant that it is lacking in the spirit of joyousness, and that joy is the essence of great art, how are we to explain the admiration, the adulation, that for centuries has been heaped upon the Roman style? It is necessary, first of all, to concede that it is no new thing for artists, and even for critics, to mistake a crow for a swan. The vogue of the eclectic painters, whose art is so closely akin to that of ancient Rome,



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lasted until yesterday. Perhaps we have already touched upon the inner essence of the matter in discussing the relative values of original and copy, and the necessary inferiority of the latter. Roman art is a copy, a free copy with variations, but still a copy. For long centuries the original remained unknown. It was unsuspected that Roman architecture was a copy. Men praised it for a beauty it possessed only at second hand. Winckelmann set the modern world upon the track of discovering the original. When Greek architecture had once been brought to light, the inferiority of the Roman replica became manifest. It was at once clear to architects, critics and public alike (at least in America) that the spirit of joy, of enthusiasm, of poetry was present in Greek work, and that Roman architecture possessed these qualities only by reflection. There ensued the Greek revival. However, a little knowledge proved a dangerous thing; modern architecture imitated from the imperfectly comprehended Greek was seen to be less successful than that inspired by the more tangible Roman style. Hence the profession sought to restate the sadly shattered idol on her paper

throne.

Furthermore, in accounting for the popularity of Roman architecture, we must constantly bear in mind that the art exists only in imagination. Each person has had to reconstruct his own visual image of the appearance of the buildings. Former centuries did not possess our prosaic archeological information. Inspired by the beauty of the ruins, a Piranesi might imagine Roman art fired with an originality, a joyousness, which the Romans never knew. Many architects, notably our own Thomas Jefferson, have done precisely this. Thus the shade of Rome was shrouded with a phantom glory.

From what has been said, I think, it will be evident that I must continue to differ from Professor Hamlin on the question of Roman art. What I felt instinctively, intuitively, as a boy, has been confirmed by the most careful study and thought of which I am capable. I believe, and I believe deeply, in Greek, Romanesque and Gothic. I believe in the Italian Quattrocento, and the American Colonial, even in the Barocco, if you will; but I refuse to bow down before the Goddess Rome.—Arthur K. Porter, in "Architectural Record."

ARCHITECTURAL WALL PAINTING

A theory has prevailed in very modern times that painting on walls for architectural embellishment should have a different character from that which belongs to what we commonly understand by picture painting. It is thought that the ornamental purpose of a wall painting and the conditions under which it must be seen require that it should differ fundamentally from an easel picture enclosed within a frame and viewed independently under favorable light.

The most distinguished exponent of this theory was the late Eugene Viollet le Duc, who, in the article "Peinture," in his "Dictionnaire Raisonne de L'Architecture Francaise," maintains that in order to secure the relationship that should exist between archi-

tecture and any painting with which it may be adorned, the painting must conform to and emphasize the structural forms and have a conventional character wholly different from that of purely pictorial painting. Picture painting and wall painting, he tells us, should proceed on different lines and reach different results. A picture, according to him, is a representation of a scene, with light falling in one direction and with unity of effect. To view such a picture from any other than the true station point is, he thinks, painful to a sensitive eye. The primary function of an easel picture is, he affirms, to produce optical illusion, which is incompatible with the ends of monumental painting on walls. Therefore, he tells us, the most brilliant epochs of

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art admitted no such enormities as those of pictures with their horizons above the eye and their perspective centres possibly far to the right or left of it.

In support of this view the author cites historic examples and affirms that the further we go back in the history of the art the closer relations do we find between architecture and any ornamental painting on its walls, arising from conformity of the painting with the structural forms, and from the absence of developed pictorial qualities. He reminds us that in France during the Middle Ages, such wall painting as there was retained the character of the more ancient art, and thus fulfilled the conditions that he thinks essential to effective ornament. He observes, however, that the Byzantine mosaics, so freely employed in the early medieval monuments of Italy, are not always in accord with the architectural forms; and on this account, as well as because of what he considers an objectionable metallic quality, he characterizes them as barbaric. It is certain, he remarks, that the Greeks of antiquity, though they held color decoration to be necessary to architecture, were too appreciative of form to admit such works in their monuments. Save in these mosaics the color decoration of walls did not, he affirms, lose the conventional character that he considers essential, until the time of the Italian Renaissance, when isolated pictures, painted in the studio, were substituted for paintings directly on the walls.

In discussing further what he considers the proper difference between wall painting and independent picture painting, he maintains that those peoples who are commonly thought to be the finest colorists—as the Venetians and the Flemings—are not colorists in the sense that the Chinese, the Japanese and the Persians are colorists. To give an effect of reality in a picture by delicate half-tones, as in the works of Titian or of Rembrandt, and to make a shawl of Tibet which pleases the eye by nothing more than an harmonious combination of flat colors, requires, he thinks, two very different operations of mind.

This argument, it appears to me, proceeds on a mistaken notion. It rests on a misconception of what it is that gives ornamental value to wall painting, on the one hand, and ignores, on the other hand, the ornamental quality that underlies even the most realistic art, if it be art at all. What may be called the fundamental qualities of color design are common to painting in all its forms. While there is, indeed, a great difference between a painting by Titian and the abstract color composition of an Eastern fabric, there is not such a difference as to justify the affirmation that they proceed on different lines and have nothing in common. A little consideration will show, I think, that the art of Titian is but a development of that of the Eastern weaver. For the abstract color patches of the fabric may give place to suggestions of the figures of men and animals, and the his-

toric development of figure painting, from that of the most primitive art to that of Titian, consists in little more than giving to the grotesque symbolism of the ancient composer a more natural character, by improved delineation, by the addition of tones and gradations that suggest relief, and by the introduction of groupings in receding planes with gradually perfecting perspective. The distinguished writer whose theory we are considering has failed to perceive the essential oneness of all painting, whether on the walls of buildings or on isolated panels or canvases. Thus the fact that suitable conventions in all forms of art take care of themselves when the artist works without sophistication has escaped him, and he does not see that no vital art is the outcome of a theory.

In order to reach a clear understanding of the true principles of wall painting it will be well to consider (1) what constitutes the ornamental value of such painting and to what extent naturalism may be consistent with it; (2) how far pictorial art unconnected with architecture should have an ornamental quality; (3) how far historic monuments justify the notion that wall painting must be essentially different from other painting; and (4) what line of distinction can be drawn between ornamental wall painting and painting that is primarily pictorial in motive.

I.

In order that painting may have value as ornament it must present a broadly effective color harmony; it can admit nothing inconsistent with this. But all color composition is of necessity based on form of some kind. Even Viollet le Due's shawl of Tibet has its color patches proportioned and limited by some sort of outlines, and the ornamental painting of more cultivated peoples—as that of the medieval French illuminators—is on a foundation of beautiful linear composition, which is essential to the total effect of the color scheme, since this depends on the magnitude and location of every patch and speck of color, and these are fixed by the lines. In such art the eye is charmed by beauty of line and color apart from any representative character or suggestion that may be included; and this I conceive to be what constitutes the ornamental quality of painting.

But ornamental painting need not be exclusively of this very abstract character. It may admit a considerable amount of pictorial naturalism. Even perspective and chiaroscuro are quite compatible with ornamental effectiveness, so long as the principle of form and color harmony is kept dominant. There is no ground for Viollet le Due's affirmation that a picture can be viewed with comfort from no other than its exact perspective station point. A picture is rarely seen from precisely this point, and it may be viewed from many points far distant from it without material disadvantage. The eye makes large allowance in this matter, and it would puzzle the average beholder to find the true station point from

which the perspective of almost any given composition was determined. Moreover, few, if any, great works of art are rigorously correct in perspective. Considered as ornament, what we regard in wall painting is not verisimilitude, but, as already remarked, the broad division of the surface into proportioned spaces of harmonious color on a beautiful linear basis. On this foundation it is hard to fix a limit to the degree of naturalism that may be allowed.

II.

What we commonly understand by pictorial art—art not associated with architecture—is not properly mere imitation of nature with a view to illusion, though the idea that it is so has widely prevailed in times of technical advancement in the means of imitation, both ancient and modern. It was not unnatural that such an idea should arise in the popular mind after painting had become dissociated from architecture, and skill enough to make illusive suggestion possible had been attained. But so long as the art was mainly confined to wall surfaces and the embellishment of small objects, including the pages of handwritten books, naturalism was not developed to an extent that could give rise to illusive imitation. With the advent of the easel picture, however, the idea of likeness to nature was strengthened and at length became so engrossing that the ornamental principle was lost sight of. This condition is indicated by the remarks of ancient writers about likeness to nature in the works of their great artists, as in the story of the horse neighing at a picture of a horse by Apelles.

In modern times this idea of nature began to be strongly manifest in the sixteenth century, and the writings of Vasari abound in indications of it. Vasari's estimates of works of art are, as every reader of his writings is aware, largely based on the notion that life-likeness constitutes the chief merit of painting; and he finds little to commend in the works of early masters, save where he thinks they show some degree of developing naturalism. His conception of pictorial excellence is fairly set forth in the following remarks on the so-called Mona Lisa of Leonardo da Vinci:

"Whoever shall desire to see how far art can imitate nature may do so to perfection in this head, wherein every particular that could be depicted by the utmost subtlety of the pencil has been faithfully reproduced. The eyes have the lustrous brightness and moisture which are seen in life, and around them are those pale red and slightly livid circles, also proper to nature, with the lashes, which can only be copied as they are with the greatest difficulty. The eyebrows are also represented with closest exactitude, where fuller and where more thinly set, with the separate hairs delineated as they issue from the skin, every turn being followed, and all the pores exhibited in a manner that could not be more natural than it is; the nose, with its beautiful

and delicately roseate nostrils, might be easily believed to be alive; the mouth, admirable in its outline, has the lips uniting the rose tints of their color with that of the face in the utmost perfection, and the earnians of the cheeks do not appear to be painted, but truly of flesh and blood: he who looks earnestly at the pit of the throat cannot but believe that he sees the beating of the pulses, and it may be truly said that this work is painted in a manner well calculated to make the boldest master tremble, and astonishes all who behold it, however well accustomed to the marvels of art."

This is, of course, gross exaggeration. No such ridiculous elaboration will be found in the picture, highly finished in detail though it is. But the remarks give the measure of Vasari's notions of pictorial merit.

The same ideas had prevailed, as I have said, in the times of later Greek and Greco-Roman art, and found expression in the writings of Vitruvius and of Pliny; from whom, no doubt, Vasari largely drew his ideas. Most modern writers also have based their judgments on the same ideas. The more recent among them employ new phrases, as "tactile values" and "space composition," but the meaning is the same. Such people forget that representation of nature does not constitute a work of art and that optical illusion is not the aim of a great artist. The great artist does not strive to trick the eye, but to illustrate beauty through the natural conventions of art. He appeals to the imagination by truthful suggestion; but with whatever degree of naturalism he may clothe his idea, his primary object is to produce a harmony of form and color. The most naturalistic work of a true artist has thus an ornamental value apart from any idea of representation that may be included.

III.

The notion that wall painting should be essentially different from other painting finds no support in the art of the past. It is true, indeed, that a great deal of ancient painting on walls was very conventional and consisted only of childlike outline and flat color with no perspective and nothing of what we understand by pictorial composition. But that this character was not given from any theory that wall painting should be different from other painting is shown by the fact that all other painting of the time had the same character. The wall paintings of the tombs and temples of the Nile and the paintings on papyrus rolls and mummy cases are identical. The conventions of ancient Egyptian wall painting were thus, it appears, due to the undeveloped state of the art at the time and not to any notion that they were particularly appropriate to painting on walls.

We know nothing from extant remains of wall painting among the Greeks in the best time of their artistic culture; but of Greco-Roman wall painting—which without doubt reflects, though imperfectly, the lost art of

Greece—we have abundant knowledge from existing examples. These, of which there are many in excellent condition, answer to the account given by Pliny, who speaks of the decoration of walls in the time of Augustus, "with representations of villas, harbors, landscape gardens, sacred groves, woods, hills, fishponds, straits, streams, and shores." The rich collection of such paintings, preserved in the Naples Museum, shows that a remarkable degree of naturalism was common in them. Although by inferior workmen, often faulty in drawing and always coarse in execution, these works exhibit advanced qualities, including perspective and *chiaroscuro* of very modern appearance. But there is no difference between the wall paintings and the easel pictures, both of which are numerous in the collection.

Coming now to the Middle Ages, we find that in France and elsewhere wall painting was more archaic in manner than that of ancient Rome. With the breaking up of the old civilization the ancient skill in the arts was lost, and on the medieval revival a fresh start had to be made, with such help as could be got from tradition as embodied in the Byzantine manuscript illuminations and small ivory carvings that were widely circulated in the monastic libraries of Western Europe.

Little of the French medieval wall painting survives, however, and in the Ile de France—where the finest art of the Middle Ages was produced—there is almost none at all. But such mutilated fragments as may be found, as in the wall arcades of the Ste. Chapelle of Paris, make it clear that it had the same character as the contemporaneous manuscript illuminations, of which great numbers are preserved. This miniature painting, on the pages of missals and other books, has no perspective save such as belongs to the most childlike attempts at foreshortening. Forms are described by firm outlines in black or dark brown, colors are laid in nearly flat fields, though there is some suggestion of modeling. Cheeks are rouged, lips are reddened, eyes and hair are colored. But there is no expression of light coming from one direction. Lights and shades may occur equally on both sides of an object. Backgrounds are mostly flat—either of color or of gold—and while symbolic representations of architecture and furniture occur, neither these nor the human animal figures have any ground to stand on. Thus wall painting and other painting were alike in France during the Middle Ages.

The most important wall painting in the history of art is that of Italy from the fourteenth to the sixteenth centuries; but this painting, even from its beginnings, has a distinctly pictorial as well as an ornamental motive. The frescoes of Giotto and of Lorenzetti do not at all conform to the theory of Viollet le Due. They have little of the flatness and symbolic abstraction of the earlier French work supposed by him to be essential

to architectural effectiveness. Giotto's figures are as natural as he could make them. They are grouped in receding planes; they are modeled with great fullness; there is much freedom of action and of foreshortening, and they have ground under their feet, with landscape and architectural backgrounds in the best perspective that the early master could manage. Each composition is a complete picture, though it is harmoniously related to the general ornamental scheme of the series to which it may belong. That these frescoes are architecturally effective is not because of any avoidance of pictorial development, but because they are founded on those broad principles of harmony in form and color that constitute, as I have said, the ornamental quality of painting. Therefore they illuminate the walls of the churches and cloisters where they occur, just as the works of the French ornamentier illuminate the pages of a missal. And the frescoes of Giotto on the walls differ not at all in pictorial character from his panel pictures in tempera.

The progress of Italian wall painting, from Giotto to Raphael, exhibits a steady advance in natural pictorial development; and at every step of this advance it corresponds entirely with all other Italian painting of its time. There is no difference at all between a fresco on a wall and a panel picture on an altar, in so far as concerns the principles on which they are respectively composed. Compare the frescoes of Michael Angelo on the vault of the Sistine with the Holy Family by the same master in the gallery of the Uffizi; or compare the frescoes of Raphael in the Vatican chambers with the Saint Cecilia by him in the gallery of Bologna. In such wall compositions as the School of Athens and the Expulsion of Heliodorus, Raphael has done all that he could, by means of perspective and *chiaroscuro*, to give relief to his figure groups and retirement to his architectural vistas. Thus, before the resort to pictures painted in the studio, as substitutes for painting directly on the walls, we find that same development of pictorial qualities in wall decoration which Viollet le Due attributes to the studio pictures.

It is thus clear that no support for the notion that wall painting should be different from other painting can be drawn from the art of the past; and there is therefore no historic ground for the theory that wall painting and picture painting proceed on different lines and involve essentially different operations of mind.

IV.

Does it follow, then, that there is no necessary difference between effective wall painting and other pictorial art? It appears to me that there is only this difference—namely, that in the one case what I have called the ornamental quality of painting is made to predominate, while in the other the pictorial element counts for more. Both must have ornamental value; but the wall painting fulfills its function primarily by its ornamental qual-

ity, while in the easel picture we look more for the suggestion of nature. It is hard to find any other difference, save that which results from the different materials employed—on which a word may be said.

Nearly all wall painting of ancient times and of the Middle Ages was executed in fresco, a process which has a peculiar fitness on architectural adornment, both on account of its durability and its quiet effect. The pigments available in fresco painting are for the most part ground earths that are comparatively dull, and therefore fresco painting does not lend itself to great brilliancy of coloring. Moreover, the colors in fresco, being mixed with water only, sink into the wet plaster on which they are laid and dry with a dead surface. They have thus a different effect from colors tempered with size or oil laid on a dry ground and afterwards varnished, as in tempera or oil painting. In fresco, too, since the plaster dries quickly, it is necessary for the artist to work with comparative speed; and as no retouching is possible after the ground is dry, any degree of elaborate finish requires great dexterity and is usually avoided.

The conventions of mosaic are radically different from those of any kind of painting proper. The small cubes of stone or glass of which the picture is made up cannot give the finer gradations and blendings that are readily attained with ground pigments laid on with the pencil; and although it is possible by the use of very fine tesserae to obtain somewhat fine transitions and interblendings, such refinements cannot approach those of the pencil and are destructive of the natural qualities of mosaic art. The best wall mosaics—the best because they bring out the proper qualities of the materials employed—are made up of measurably large stones, the smallest being rarely less than three-eighths of an inch in diameter, which have their effect as cubes even when the work is viewed from a considerable distance. The true mosaic worker seeks no refinements that are not compatible with a frank expression of the nature of stone inlay.

As for stained glass, which in the Middle Ages gave splendor to the great openings of Gothic churches, normal design in this material is a translucent kind of mosaic, with conventions even more severe than those of any other mode of color decoration. The fact that it must be seen by transmitted light differentiates it fundamentally. In its integrity it is composed of small bits of glass, each one of which is held in place by a frame of lead that gives a thick dark outline. There is nothing in good medieval glass that can be called painting, and such delineation as occurs is of the simplest and most conventional kind. Under these conditions it is obvious that pictorial qualities cannot be developed with any fullness. Only the most abstract and symbolic suggestions of things are possible without loss of that jewel-like splendor which is

the distinctive quality of design in glass. The worker in stained glass who appreciates its qualities and ends does not seek to overstep its natural limitations. He perceives that the essential value of his art is a consequence of them, and that he cannot develop his compositions pictorially without doing violence to its principles.—“Architectural Record.”

ZONING.

Distrioting, or zoning—as it has come to be known in city planning parlance—implies the limitation by law of certain regions of a city to certain specified industrial, manufacturing, residential or other well defined purposes, and the consequent segregation of factories and public buildings, as well as other distinct types of edifices, with the necessarily resultant limitation of their heights and areas. There remain, of course, the obvious exceptions of schools and churches and the like, which are not physically detrimental to residential districts, and several similar reservations.

In a recent annual report, the Philadelphia Housing Association has published an admirable summary of the case for scientific distrioting in these few paragraphs: Zoning recommends itself because—

It gives stability to property values; prevents the deterioration of neighborhoods with the attendant wastes; allows for necessary changes, but prevents those of a shifting character.

It segregates obnoxious trades, preserves the character of residential areas and stimulates the use of natural advantages for the purposes for which they are best adapted.

It simplifies traffic regulations and expedites transit; by the distribution of homes and the encouragement of the erection of private dwellings, it tends to eliminate congestion by distributing the population.

It segregates factories along natural or artificial traffic lines and conduces to economy in industry. While providing for the general well being of the public, it improves the living conditions of the workers and aids in reducing the cost of living.

It reduces the amount of insanitation and attendant dangers, thereby making for public health. It establishes more equitable housing standards. It contributes to the beauty of the community and aids in the economical administration of municipal government.

In these pithy sentences we have the entire gist of the zoning question very capably summed up. If these facts, thus succinctly stated, could be brought to public notice the benefits of zoning would no longer be among the poorly understood aspects of city planning.—Richard F. Bach, in “Architectural Record.”

REMEDY FOR DUSTY FLOORS.

If a floor becomes dusty after it has been laid, how can this be remedied? Of course, it can be taken up and done over, which is very expensive and unnecessary. If the surface is

given a coating or two of boiled linseed oil, this will almost invariably make it dustless. There are cases of floors so dusty that if one had the patience, with a stiff corn broom (not bristle), it would seem almost possible to sweep the whole floor away; and yet they were absolutely cured from dusting, for an indefinite period by the use of boiled oil.

When common linseed oil is boiled, a thickening material put into it makes it dry much quicker than raw oil. It then forms on the surface, or in the top one-eighth or one-sixteenth inch of the concrete. The writer does not know the chemical reaction, but supposes the oil is somewhat saponified by the alkalies. The oil gives a greasy gloss to the surface, which stands wear until the cement can take care of itself. It probably causes the dust-forming portions of the surface to wear away much more slowly, so that the dust is not noticed. The writer knows of an extremely dusty floor so treated which after twelve years is still in excellent condition.—L. C. Wason.

BUILT-IN FEATURES.

It is perhaps true that the built-in idea is sometimes overdone, or at least used too indiscriminately. However, when rightly employed, there is much to be said in its favor. In the first place, it unquestionably is very largely responsible for the considerable improvement that in the last few years has been made in our homes, of the inexpensive class, especially in the way of endowing their interiors with greater convenience and attractiveness, as well as with a general appearance more suggestive of cosiness. The employment of the idea also makes possible, at slight additional construction cost, a quite appreciable saving in the sum to be expended for furniture, and that, too, is an important point in its favor where one must build and furnish economically.

For the dining room especially, a limited use of built-in features seems appropriate. The room naturally requires that it be furnished with something in the way of china cupboards, sideboard, and so forth, and for meeting this need it is rarely indeed that the built-in idea may not be employed with the utmost satisfaction. In fact, through its use the necessary china closets and sideboard, as well as drawers for silverware and shelf cabinets for table linen, are frequently combined in a single feature, which not only means a saving in money, but also often enables an appreciable economizing of the room's floor space. And, finished to correspond with the rest of the woodwork, such a combination of features, if properly designed, is invariably quite as effective toward making the room attractive and home-like as are the factory-made pieces—at least of the cheaper grades.—“Keith's Magazine.”

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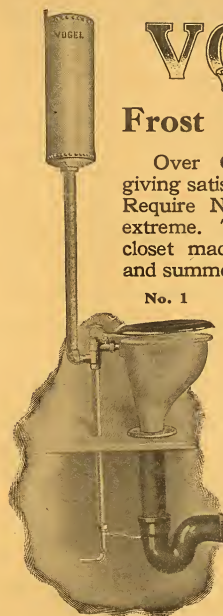
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Vol. XXXIII., No. 6
February 6, 1918

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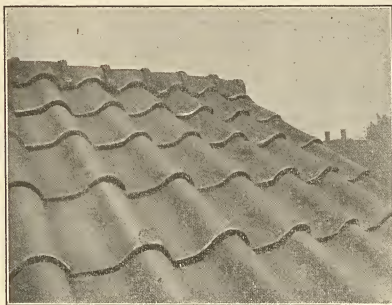
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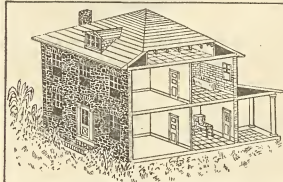
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 6

PHILADELPHIA
February 6, 1918

BUILDERS' GUIDE

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and Builders' Guide

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As The Editor Sees It



WITH adverse weather conditions adding to the natural depression growing out of the high cost of labor and materials, the uncertainty regarding deliveries and kindred difficulties, construction work in Philadelphia, for the month ending January 31, reached the lowest point it has yet touched establishing a new low record.

According to statistician W. W. Gamble, of the Philadelphia Bureau of Building Inspection, the total number of permits for the month was 212, involving 246 operations and a gross expenditure of \$1,683,900. Of this total three operations furnished almost two-thirds of the entire cost of all building work undertaken during the month. These three operations were: The 12-story office building to be erected on the site of the old Chestnut Street Theatre, which will cost \$755,000; a round-house and repair shop for the Philadelphia & Reading Railway that will cost \$300,000, and a factory in West Philadelphia to turn out munitions that is to cost \$150,000.

Dwelling operations for the month totaled \$97,300; additions, \$121,175, and alterations and repairs, \$152,920.

During January of 1916, 449 permits were issued for 613 operations involving an outlay of \$2,144, 630.

The summary of the building work for the month—January, 1918—discloses the fact that there were 37 operations for the erecting of two-story and but 3 for three-story dwellings, showing to what

extent operative building has declined as a result of war conditions. Even factory construction fell off notably, but one permit being of record for this class of work. Two office buildings got under way during the month and one church.

It should, of course, be understood that a certain percentage of the inactivity here shown is clearly accountable on the score of bad weather conditions. With the return of settled weather there is every reason to believe that conditions in the trade will appreciably improve. This is particularly to be predicated of dwelling operation work, which is not dependent either upon steel delivery or transportation delays, being in a position to draw the materials needed, if necessary, from local sources.

* * *

GENERAL MANAGER MALLALIEU, of the National Board of Fire Underwriters, touched, in an address delivered at the recent convention of the Fire Marshals' Association at New Orleans, on the large number of fires, incendiary and other, that are traceable to inadequate watchman service. His address is so timely now that much destruction of valuable property is plainly the work of German sympathizers, that I am moved to reprint a few of its more salient paragraphs. On the subject of "Superannuated Employees," Mr. Mallalieu said:

"The subject of watchmen opens a big field for consideration. The prevail-

ing custom among manufacturers, warehousemen and others is that of engaging as night watchman some superannuated employee who is no longer physically able to earn a workman's pay. Such a watchman may make his occasional rounds of clock stations in a purely mechanical way, but the amount of real protection which he furnishes, especially in war time, is very small. Generally he can be avoided with ridiculous ease by any one who is in the place with hostile intent. Or, if not avoided, his overpowering is a matter of little difficulty.

"Some of you know of a recent test in a very large grain elevator, where inspectors were sent into a plant at night time, without the knowledge of the aged watchman. These inspectors spent six hours within the plant and made drawings of many of its important features, but their presence was never once detected. As a consequence the owners were given the alternative of engaging a sufficient number of young and vigorous guards or of having their plant taken over by the State authorities.

* * *

THE big Baltimore fire of October 30th is a striking example of insufficient watchman service. Here was a pier, 900 feet long, containing such a valuable accumulation of freight as 50,000 bales of wood pulp, 150 carloads of flour, 20 cars of tobacco, 30 cars of bark extract, 40 cars of lubricating oil, 25 cars of spelter, 23 cars of roofing

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**BLUE
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paper, 15 cars of miscellaneous freight in the portion of the pier that was destroyed. Pier 9 contained 29,000 bales of wood pulp, 7,000 cases of imported liquor in the bonded end, 300 crates of earthenware, 100 bales of oakum, 100 cars roofing paper, 50 cars of linseed oil cake, 20 cars of tobacco, 23 cars of miscellaneous freight. Think of leaving these stores in the sole charge of a single watchman in a time such as the present!

"There are really few subjects in fire prevention so important as the abrogation of this time-honored custom of inefficient watchmen. To make the safeguarding of our production of supplies depend upon those who can furnish only nominal safety, during the hours when darkness brings the greatest dangers, and to do this in a period of extensive hostile activities would be ludicrous if it were not so grave. It is equivalent to locking the windows and leaving the front door open.

WATCHMEN are charged with extraordinary responsibility. They should be picked men, not derelicts. They should be intelligent, courageous, and physically active. They should be sufficient in number to furnish real protection. They should be armed. They should receive special training for their important duties, and this training should include knowledge of fire alarms, fire prevention and fire protection. They should never be engaged except upon unmistakable evidence of character, and they should be paid the salaries that will command such qualifications.

"I wish respectfully to suggest that you gentlemen give early and earnest consideration to the correction of what we may well call 'the watchman evil.' I wish to raise the point as to whether each one of you may not profitably undertake to secure statistics of the watchmen's service in his own State, and to formulate means for a sweeping reform of the whole absurd system. If this can be done, and I believe that you can do it, the efficiency and safety of the nation will be greatly enhanced. It is a crying need of the present hour."

AS a result of Mr. Mallalieu's address the Fire Marshals' Association passed the following resolutions:

WHEREAS, We recognise the danger that exists during this very critical period in the world history because of the inefficient and insufficient protection of our foodstuffs and all commodities and materials necessary for the successful prosecution of the war; therefore be it

RESOLVED, That every State and provincial fire marshal be charged with

the duty of bringing this condition to the attention of the owners of such properties and requiring them to properly protect same by guards adequate in number, of unquestioned loyalty and physical fitness, to the end that these properties may be saved from destruction by fire through crime or negligence; and further

That the Secretary of this Association be instructed to transmit a copy of this resolution to each and every fire marshal within forty-eight hours from the adjournment of this meeting.

IAM in receipt from the Philadelphia Expanded Metal Bureau of Statistics, of the following communication:

"The workmen from Hog Island, who will occupy the houses to be constructed in the Fortieth Ward, should be given every consideration. The material used in these houses should be of a nature that will make them as near fireproof and vermin-proof as possible, and also in a manner to protect them from the elements.

"Where such a large number of men come into contact, such as is the case at Hog Island, there is no telling when an epidemic may break out and disease carried to the homes of the workers. Where homes are constructed of materials that will allow vermin to breed, the efficiency of the workers must eventually be impaired, and the city authorities should take every precaution to avoid construction of this nature. A sea of houses, such as this operation will be, would be unbearably hot in the summer months without the proper shade and difficult to keep warmer in the cold season, unless materials in the construction are carefully selected.

"The Philadelphia Expanded Metal Bureau of Statistics have called attention of the authorities to Metal and Lath construction, which is undoubtedly fireproof and vermin-proof, and buildings constructed of this material retain the heat in cold weather and prevent the ingress of the heat in the summer months.

"Labor conditions will prove that this type of dwelling can be erected more readily than any other type at the present time, as mechanics used in this construction consist of Lathers and Plasterers, and the latter especially are available, inasmuch as they have not enjoyed the general prosperity as some of the other trades working on Government contracts, cantonments, etc. If there is any additional initial cost in the materials used in this type of construction, cost of the finished dwelling should be no more than the unsanitary methods used, as the rapidity in the erection cost and the saving of labor would offset this item.

"The durability of stucco and plaster construction on Expanded Metal Lath has been proved by the tests of the United States Bureau of Standards, copies of which the Government furnishes on request. From a census taken of the material on hand, by the Metal Lath Manufacturers, enough material could be furnished within a few days to complete an operation of any magnitude.

"Many of the male occupants of these houses would be working long hours and many of them on night shifts, so that they may not be able to give proper attention to their homes, and as many women and children will be in the houses in this colony, they should have homes that are comfortable, both from a health and safety standpoint."

THE suggestion presented in the foregoing communication is an interesting one. Just what material or materials the gentlemen in charge of the Hog Island housing project have in mind I am not able to say, but I certainly agree to this extent with the Philadelphia Expanded Metal Association, that the material selected should be fire retardant and sanitary. It would be a fatuous order of folly that would place within the city limits a group of dwellings that would be a menace under either of these two heads.

THE Architect's Place in Home Building" is somewhat breezily discussed by H. A. Sullwold in the *St. Paul Pioneer Press*.

"There are two things the prospective house builder wants," writes Mr. Sullwold, who is an architect. "First, he wishes a living room, a dining room and a kitchen downstairs, whether he earns \$10 a week or \$200. In the second place, he wants his own ideas expressed in his house, even if they tend to pink cement and purple paint or cement blocks and five-foot eaves. He hires an architect and then many times does not use his ideas. The usual expression is, 'It's my money I'm spending; I ought to be able to do what I want with it.'

"The time will come when the architect will sign his name to his finished work, even as the artist does his to-day. Then his client will not go to any architect with demands for wide eaves or Doric porches; he will go to one who has developed a style or styles which permit of those things, or at least one who is in sympathy with his demands. An art connoisseur tells his friends he has chosen a Rembrandt. So this man will exhibit a pride in having a certain architect.

"Given a certain number of square feet of lumber, a fixed amount of stone or concrete, a fixed sum for labor, and so

on down the line, a prospective builder will get a better house and a more artistic one by employing an architect than by not.

"He must not hamper the architect, however, by insisting upon certain brick, or certain shingles, or certain other materials if he expects to get everything an architect has to give. The architect has spent years of schooling and apprenticeship so as to be capable of giving the correct artistic and constructive advice. It is his aim to spend time on the work, many times working out details on the job with the workmen, to imbue them

with the spirit of creating something that will add to the character of the people who will occupy the home when finished.

"If, therefore, you are one of the lucky ones, who take pride in your house because a certain architect designed it, and you know it is good because of that fact, it is bound to influence your life and that of your children just as a good painting on the wall of your hall may influence those who live with it. You may not at first appreciate all of its worth or refinement, but it will grow, even as the knowledge of a good painting grows."

EDITORIAL NOTES

The New Jersey Chapter of the American Institute of Architects is giving serious consideration to the possibilities of beautifying the section of the Lincoln Highway in their State. A campaign for this purpose has been started by Hugh Roberts, secretary of the chapter. In a letter to his associates in this connection, Mr. Roberts says:

"In many places in other States a 'model mile' has been built through individual or community efforts, and these have set a standard and stimulated local pride in the improvement and maintenance of the Highway. It is hoped that some of our citizens, municipalities or counties may be induced to enjoy a number of such miles so that the people passing may see the possibilities and be induced to lend their support to making the New Jersey section of this road the best in the country."

The fifth national foreign trade convention is to be held in Cincinnati, Ohio, on February 7, 8 and 9. Headquarters are to be at the Hotel Gibson, but anyone desiring particulars about the meetings may obtain them by addressing Secretary O. K. Davis at permanent headquarters, 1 Hanover Square, New York City.

B. H. Wait has been appointed district engineer for the Portland Cement Association, 101 Park avenue, New York City.

The time for the consideration of "temporary" housing for workmen has passed. Plants of a permanent character are being established in various sections of the country. A necessary adjunct is the proper housing of employees, so if business is to be conducted along proper and economical lines, provisions for workmen must be considered along lines which will permit the establishment of families within easy access of the place of employment. It is only in this way that the great turnover of labor can be avoided.

National Association of Sand and Gravel Producers will hold its annual convention in Chicago, Ill., February 7 to 8, 1918. Head-

quarters will be at the Great Northern Hotel. An interesting program has been prepared and open discussions will be conducted upon a number of live topics.

H. M. Scott, of the Edison Portland Cement Co., is on a combination business and pleasure trip to Cuba and the West Indies.

Throughout the city tenants are experiencing trouble with the gas. The pressure is lower than normal, and this is due to the fact that thousands of families are using gas to help heat their homes. It is necessary to conserve gas as much as possible for the gas companies are doing their utmost to supply a normal service. This cannot be done without the co-operation of the consumer.

The United States, importing before the war as much as \$10,000,000 worth of aniline dyes a year, in 10 months of last year exported dyes valued at \$12,500,000.

Frank Hitchcock, formerly Postmaster General, has been elected temporary president of the Vulcan Steel Products Company of New York.

Pennsylvania and Atlantic Seaboard Hardware Association and the New York State Retail Hardware Association will hold a joint annual convention and exhibition in New York City, February 12, 13, 14, 15, 1918. Headquarters at the Hotel Astor.

William Pitkin, architect, has recently moved his offices from 512 Cutler Building to the Warner Building, St. Paul's street, Rochester, N. Y.

American Ceramic Society will hold its twentieth annual meeting at Indianapolis, Ind., February 11 to 13. A number of vitally important matters concerning the future of this organization will be presented for consideration at this meeting.

Major William A. Starrett, Engineer Re-

serve Corps, has been assigned to duty as contracting officer for the War Industries Board, United States Food Administration and the Ordnance Department.

New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the management of Louis W. Buckley. The floor space to be occupied equals 100,000 square feet.

William E. Walsh has been appointed superintendent of the Bureau of Buildings, Borough of Manhattan, New York City. He succeeds Alfred Ludwig. Mr. Walsh has been a building contractor in New York City for the past twenty-one years.

Lewis D. Rights, contracting manager for Lewis F. Shoemaker & Co., with offices at 45 Broadway, New York, as secretary-treasurer of the war service committee of the Steel Fabricators of the United States, has located offices in the Munsey Building, Washington. The committee is substantially a selling and distributing committee for the bridge, building and plate fabricators of the country.

Eastern Supply Association will hold its winter meeting at the Hotel Astor, Wednesday, February 13. There will be both morning and afternoon sessions. A most interesting program has been arranged for this meeting and the members are invited to submit any questions that they desire to have discussed.

Frank W. Hall was recently appointed commercial manager of the Sprague Electric Works of the General Electric Company. With the exception of a short period, Mr. Hall has been connected with the Sprague Works continuously for twenty-two years in various engineering and sales capacities, and for the three years prior to his present appointment occupied the position of sales manager.

American Concrete Pipe Association will hold its annual convention in Chicago, Ill., February 8-9, 1918. Secretary, J. H. Libberton, 205 South La Salle street, Chicago, Ill.

Governor Edge, of New Jersey, announced that General Goethals would continue as State Engineer of Highways. Of the \$3,000,000 now available from the road tax, approximately \$2,871,000 will be spent during 1918 for the improvement of parts of the routes selected as being of military and commercial importance.

The sale of the Whitestone Silica Fire Clay Company's property at Carleer, N. J., takes from the market one of the few remaining New Jersey shore parcels, between Elizabeth and Perth Amboy. The deal was negotiated through Ruland & Whiting Company and Harrison S. Colburn Company. The new owner will improve the property in the near future. It consists of ten acres, having a frontage of approximately 500 feet along the Arthur Kill, and extending back 1,000 feet to the tracks

of the Central Railroad of New Jersey. The property lies between the Williams and Clark and the American Agricultural Chemical Company's plants. It has riparian rights granted by the State. From it a dock, 100x200 feet, extends into deep water. In the immediate neighborhood are the Standard Oil Company, the Mexican Petroleum Company, the Warner Asphalt Company, the Grasselli Chemical Company, the International Nickel Company and the Barber Asphalt Company plants.

Wilbur S. Wilding was recently appointed manager of the Eastern district, New York State and New England, branch of the Roberts Filter Manufacturing Company, with offices in the Fuller Building, Broadway and Twenty-third street, New York City. Until March of last year he was manager of the New York office of the International Filter Company, after which he was sales manager of the same company, with headquarters in Chicago, Ill.

The trade acceptance and its application to the sheet metal trade was minutely explained in an address by W. H. Carter, of Carter, Donlevy & Co., at the annual meeting of the Master Tin and Sheet Metal Workers' Association of Philadelphia. This meeting comprised the quarterly dinner meeting and was held at the Hotel Bingham. After the discussions the election of officers was held and resulted as follows: President, Charles F. Geissler; vice-president, O. Bartholomew; secretary, B. F. John; treasurer, D. G. Husted; directors, M. J. Lemhan, Joseph V. Kelley, William E. Hopkin, William A. Garraty.

Ford, Bacon & Davis, engineers, announce the formation of the Ford, Bacon & Davis Corporation, organized for the purpose of conducting a general contracting business, with particular reference to industrial, public utility and power plants, steam and street railroads, docks, steamship and railway terminal facilities, subways, tunnels, hydro-electric and irrigation projects. In effect this means the continuance in corporate form of construction work which heretofore has been handled by the firm direct. The headquarters of this concern are at 115 Broadway, New York, with offices at New Orleans and San Francisco.

Two cracks have developed recently in a wall on the seventh floor, northwest corner of City Hall, and are under observation by inspectors of the Bureau of City Property. No serious apprehension is felt by city authorities at present, it was said, as the fissures apparently are confined to the outer plaster layer of the wall, which is between the corridor and the elevator landing. Subway excavation work is under way now beneath that corner of City Hall, and an effort will be made to ascertain whether the work has caused the building's foundations to settle. If so, the underpinning will be strengthened.

Permanent wartime housing must be provided by the Government for munitions and ship workers, Charles H. Whitaker, of the

"Journal of the American Institute of Architects," told members of the Octavia Hill Association at their annual meeting at the City Club. Mr. Whitaker told of the housing projects worked out in England and said workers here could not be kept on important jobs if they were forced to ride miles to work or were housed in shacks. The twenty-first annual report of the association showed an investment of \$276,525. No building is to be done during the year, it was announced. Officers were elected as follows: President, Charles H. Ludington; vice-president, Theo-

dore J. Lewis; treasurer, Howard Butcher, Jr.; secretary, Miss Helen M. Parrish; superintendent, Fred C. Feld.

At a meeting of representatives of the building industry in the Master Builders' Exchange, an organization was effected to supply the Government with information regarding building materials. Benjamin Nusbaum, Harold Smith, James Pearce, Charles B. Kates, J. Murray, J. J. Fitzgerald and J. Boylan were appointed a sub-committee to arrange the details.

THE BOSTON EXHIBIT

The annual exhibition of the Boston Architectural Club, held in November in Rogers Hall, showed evidences of the heavy burden laid by the war on the professions of architecture and landscape architecture. The organizers of the show were confronted by a very real obstacle at the start; if they had charged an entrance fee to a public contributing to war expenditures of all kinds they would have had practically no visitors at all. Not only was this means of financial support missing, but any great outlay for decorations seemed hardly advisable, either on the part of the club itself or on the part of the Boston Society of Landscape Architects, which shared in the exhibit. In the list of exhibitors some well-known names were absent altogether, which was not strange when so many architects have gone into the army or are doing Government work.

All this does not mean that the Boston exhibition was not successful, was not worth a visit. The promoters are to be congratulated for doing so well under the trying conditions, and their example should encourage other societies to maintain their exhibitions as long as patriotic necessities will permit. Indeed, it might be suggested that a considerable section of a show be given to displaying the varied war work performed by architects—map drawings, cantonment projects, or some of the new housing schemes that the Government is said to be contemplating for workmen.

One of the most interesting exhibits was the model of a large tuberculosis hospital designed by H. F. Kellogg, contrived of cardboard elevations roughly rendered and pasted together, evidently made in the architect's own office. Simple means of showing clients what to expect in the appearance of designs are worth study, for too much elaboration in models and perspectives is a great waste. As for Mr. Kellogg's design itself, it was a fine effect of well-contrasted groups of roofs and fenestrations combining early American motives, used in the bold, sure composition of the Beaux-Arts, without losing the scale or the refinement of our native style. Another building was one in a group of the Rice Institute, Texas. In the contrasts of the many arches with the great arch of the entrance passageway, Cram & Ferguson have produced a rarely vigorous and decorative and imaginatively

composed work. Though some might find details in it not to their liking, it is refreshing beside the insipid correctness of which we have such a surfeit. Of the smaller works, the house shown by Harry B. Russell is a remarkable example of that bold, striking originality—yet well-reasoned good taste—that Boston occasionally produces. There was a hallway in the house, of tile floor and plain brick walls, decorated with a single strongly modeled round picture frame, and with the light cutting across the dark brickwork down from an immense window on one side of the hall. Even more astonishing appeared the dining room, most simply furnished, again with tile floor and brick walls, one of the few cases where brick has been successfully used in an interior. Such a design seems to point into the future, and its value is not lessened by the query as to whether it would appear too sombre and too bare the year round; assuredly it would not so appear to natures which eschew the luxurious and the pretty for the essential.

The landscape architects had a good exhibit, as was to be expected from the strong group in Boston. Here again the ravages of the war were apparent, for Olmsted Brothers carried most of the burden in a fine exhibit. Harvard and Technology were there, with Technology the more sober and Harvard the more French, a situation not without humor, for it was not always thus. Besides these school exhibits was a beautiful drawing that bore the title, "Rene Mailland, winner of the Grand Prix de Rome, 1913, killed at Verdun." It bore witness to the price that civilization must pay to barbarism.

A fine feature of the Boston exhibition was the arts and crafts room—activities suited to New England and fortunately increasing there. Here one could admire the vigorously designed and richly colored pottery and tile, the jewelry and wrought iron hardware; also the splendid silverware of Boston, reviving creatively, not imitatively, the traditions of Paul Revere.

Such exhibiting is good, not for the public's "education" alone, as Arthur Shurtleff explained in a quietly humorous address before the Boston Society of Landscape Architects, but for the good that each individual architect derives when he spots his designs along-

side others up on a wall. There his work appears somehow less imposing than on the drawing board in his own office, and faults before unnoticed or glossed over reveal themselves to him in grim rebuke.—John T. Boyd, Jr., in "Architectural Record."

GREEK IDEAL IN CITY PLANNING.

In planning more large cities, there is need of an ideal conception of what a great city may be. It is not well to become too absorbed in the vast mechanism which a city plan is and thus lose the beauty of the ideal that should animate it. For as finally worked out, a city plan is a complex organism, a weaving web of tangled problems always being solved again as the city grows—problems of engineering, transportation, sanitation, economic, political, social, architectural. But this mechanism is after all the body of the thing. What is needed is to remember its soul. Along with the idea of an organism there should be a simpler conception which should stand as a symbol, an emblem to inspire the work and make it seem more real.

To build such an ideal city in our imagination, one which may be sound in reason, and practical in execution, it is necessary to turn to the great cities of history, for from their importance and rich experience will come most of the vision of the twentieth century city.

As the earliest example appears Athens. Other famous communities preceded in Egypt and in Asia Minor, but they belong to civilization too little understood by us to furnish us with a practical inspiration. Even the most matter-of-fact American may appreciate the capital of the Athenians. He may know it for a centre of civilization, of art, letters, philosophy and manners, rich economically and powerful politically. He will realize that Athens appeared to the ancient world along the Mediterranean as a very dynamo of power, of humanism, of grace and charm, dazzling in her splendid influence. It may be imagined that every galley that entered a seaport was boarded for news of Athens. "What are they doing at Athens?" "What are they thinking at Athens?" the men of the provincial cities might have said; and the women: "What do they wear?"

This brings us nearer to the heart of the matter, which is this. Because of her simple classic position Athens typifies the highest function of a great city—to be a source, a spring of civilization that radiates out intelligence and humanity into a barren world, toiling against the forces of nature. This conception of a city as a power house distributing ennobling influence and cheerfulness into the surrounding world may seem a somewhat theoretical one, but it will become significant at once if we compare this old Greek standard with our own nineteenth century American ideal which now in the twentieth century we are only beginning to reject.

Consider the score or more of our native cities of population above 100,000. With but few exceptions, did they not rather draw in

strength from the adjacent territory than give any strength out? Did they not consume rather than produce, devour rather than create? More specifically in their manufacturing ugliness, sprawling without shape or form, they destroyed the wealth of natural beauty of their sites without thought of offering beautiful human art to replace it and to contrast with it. They drew the manhood and wealth from the country into them and gave little to the country in return. They had few or no ideas to furnish to the country, except in money-getting; it was men from the country who brought ideas into the city. To be sure, cities did offer some benefits in a crude way, as transportation and banking centres or as markets. But how slight these are when one thinks of the gifts bestowed on a neighboring world by Athens!

There is another fact about Athens that should be valuable to American cities, especially those who strive for size. I mean that Athens was not large, hardly more than a town. Thus she proves that to be great it is not necessary to be large. And furthermore, that a complex organization or city plan, greatly desirable as it is, is still less important than the ideal.

Since she was small and the lives of her citizens were simple, she had apparently a simple organization. Not much is said about it, in contrast to the remarkable mechanism that we know was developed in Rome. The ideal in Athens so far outshone the mechanism that it is never thought of. No one ever seeks to inquire whether the Athenian traffic squad was efficient, though doubtless it was handsome enough; nor is it asked whether her sanitation system ended in the fields or emptied into the Piræus. One's thoughts are directed to Socrates, to Euripides and Aeschylus, to Phidas and the Parthenon, and to the flying galleys carrying goods and ideas over the whole Mediterranean Sea from Egypt to Marseilles. This is her classic, simple unity, as a tremendous source radiating civilization and intelligence throughout the world. Athens stands for all time as a symbol—the ideal of a great city. Let twentieth century America take heed.—John Taylor Boyd, Jr., in "Architectural Record."

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

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In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

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Warehouse, Tenth and Hamilton streets, Philadelphia. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owners, Sterling Iron and Steel Co., on premises. Brick, 2 stories, 60x14 feet, slag roof, electric lighting. Plans in progress.

Store (alt. and add.), 38 South Fifty-second street, Philadelphia. Architect, Henry L. Reinhold, Jr., 1309 Walnut street, Philadelphia. Owner, L. F. Winkelman, on premises. Consists of general interior alterations, metal bulks, 1 story, hardwood floors. Plans in progress. Too early for details.

Barn (alt. and add.), Chestnut Hill, Philadelphia. Architect, Walter H. Thomas, 130 S. Fifteenth street, Philadelphia. Owner, Wm. A. M. Fuller, 1819 Walnut street, Philadelphia. Stone, changing barn into living quarters, interior alterations, shingle roof, pine floors, hot air heating, electric lighting. Plans in progress.

Garage, 1313-15 South Second street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, A. Gurowitz, on premises. Brick and steel, 1 story, 30x100 feet, slag roof, cement floors, electric lighting, stone foundations (heating reserved), gasoline storage system. Plans in progress. Owner will be ready for bids in ten days.

School (rebuilding), Heston, Fifty-fourth and Lansdowne avenue. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick, steel, stone and concrete work, restoration of building, 3 stories. Plans in progress. Owners will advertise for bids in about three weeks.

Residence and Garage, northeast corner of Fifth and Earp streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Albert H. Lieberman, southeast corner of Fifth and Wharton streets. Brick, 2 stories, 19x42 feet, slag roof, stone foundations, hot water heating, electric lighting, tile and marble work, hardwood floors. Garage, 1 story, brick (1 car), slag roof, cement floor, electric lighting. Plans in progress. Architect will take bids in about ten days.

Garage, 838-40 Carpenter street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, G. Di Negro, on premises. Brick and stone, 2 stories, 32x102 feet, stone foundations, slag roof, concrete and plank floors, steam heating, hol-

low metal sash, rolling steel doors, hollow metal skylights, metal ceilings, gasoline storage system, electric elevator. Plans about completed. Architect will be ready for bids in about one week.

Store House, Z. B. 6, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Edwin J. Bentor, Frankford Arsenal. Steel, iron and brick, 1 story, 60x35 feet, tin roof, cement floors, wire work. Lowest bid submitted by Wm. R. Dougherty, 1610 Sanson street, \$21,100.

Storage Building (alts.), No. 141, Spec. No. 2042, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, Public Works Dept., care of Pur. Dept., Navy Yard, Philadelphia. Frame, 1 story, 24x58 feet, ready roofing, maple floors, cement work, painting. Lowest bids submitted by Hogg Const. Co., 1634 Sanson street, \$1,071, 30 days; McCloskey & Bahls, 1620 Thompson street, \$1,142, 15 days.

Temporary Office Building, Schuylkill Arsenal, Philadelphia. Architect, private plans.

Owners, U. S. Government, Q. M. Dept., Schuylkill Arsenal, Philadelphia. Brick, 3 stories, 78x70 feet. Owners taking bids, due as soon as possible. Wills-Ludwick Co., 34 South Seventeenth street; Wark-Yardley Co., 1737 Filbert street; Conneen Const. Co., 1737 Filbert street; W. W. Anstine & Co., 1218 Filbert street; Albert Zellfelder, 151 South Broad street; W. O. Springer, 1624 Latimer street; Thomas C. Trafford, 1613 Sanson street; Hogg Const. Co., 1634 Sanson street; Wm. R. Dougherty, 1610 Sanson street; P. L. Hoover & Sons, 1023 Cherry street; Lam Building Co., 1001 Wood street; Ketcham & McQuade, 1029 Brown street; J. Sims Wilson & Co., 1125 Brown street; Monaghan & Losse, Inc., 3016 Chestnut street, and Wm. Linker & Sons, 831 Cherry street, are figuring.

Bulk Head Wall, West Philadelphia Stock Yards, Thirtieth and Market streets. Architect, private plans. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Concrete and timber, 12 feet high and 250 feet long. Owners have received bids.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Pitter.

Office Building (alt.), Eleventh and Filbert streets, Philadelphia. Architect, private plans. Owners, Bell Telephone Co. of Pennsylvania, Seventeenth and Arch streets, Philadelphia. Steel, fireproof construction, fifth and sixth floor alterations, pine and tile floors, electric lighting, tile and marble work, hollow tile, metal lath, wire work. Contract awarded to Albert Zellfelder, 151 South Broad street, Philadelphia.

Bank and Office (alts.), Fourth and Market streets, Philadelphia, \$9,000. Architect, private plans. Owners, Central Trust Saving Co., on premises. Consists of interior alterations. Contract awarded to Roydhouse-Arey Co., 112 North Broad street, Philadelphia.

Store Building (alts.), 1006-08 Market st., Philadelphia. Architects, Wm. Steele & Sons Co., 30 South Fifteenth street, Philadelphia. Owner, Samuel Snellenburg, Eleventh and Market streets, Philadelphia. Consists of gen-

eral alterations, tile and marble work, hollow metal sash, flush bulks, tile and cement floors, metal lath, safety treads, metal ceilings, waterproofing. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

When you stop to consider that the Guide reaches every week and is read by architects, builders, building owners, contractors and sub-bidders in every branch of building construction, you must perceive its unique importance as a medium for advertising with an appeal to that class. Every copy reaches a live prospect.

A hen is the only kind of a critter that can produce something by sitting down and doing nothing.—Exchange.

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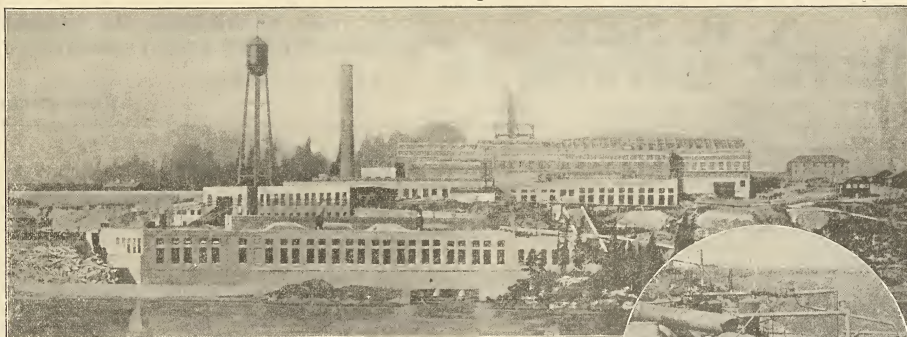
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In the summer of 1916 a terrific fire swept 650 square miles of Ontario forests. It wiped out whole villages, bringing death and terror to thousands of people.

At Iroquois Falls the population of the town took refuge in the plant of the Abitibi Pulp & Paper Company, a modern building of reinforced concrete with steel window-sashes and a Barrett Specification Roof.

The building was wrapped in smoke and flame. The air was literally afire. Thousands of cords of wood in the adjacent yards blazed in the fierce sixty-mile-an-hour wind.

For nine hours they covered there with windows and doors locked air-tight and fire-hose

and sprinklers working, while the fire raged about them.

The insurance inspectors who arrived four days later stated in their official report that *the mill-buildings were brought through undamaged.*

The roof was in good condition and is still on duty. It made an ideal, fire-proof, non-inflammable fire-blanket. Embers that fell upon it made the pitch soften and smoke but did not ignite it.

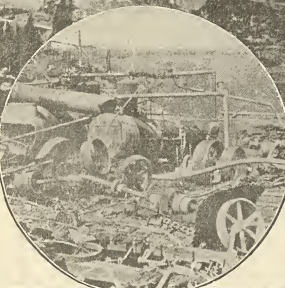
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But that is only one of their many points of superiority. Barrett Specification Roofs cost less per year of service than any other permanent roof; they cost nothing to maintain; they take the base rate of insurance and, further, they are guaranteed for twenty years as follows:

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The photos above, taken after the great fire had passed through Iroquois Falls, give some idea of the terrific heat all around the Abitibi Pulp & Paper Co. plant. Note the best and truest steel truss and frame-work.

Roofing Contra.—Metal Shingle & Siding Co., Montreal
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 Fire**

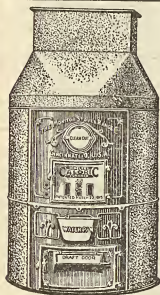
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Foundation Walls to
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PENNSYLVANIA Construction News

Post Office, Sunbury, Pa. Architect, Jas. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick, 1 story, concrete foundations, 88x66 feet, composition roof, steam heat, electric light, marble and terrazzo work, fire doors, metal lath, wood floors, roof ventilators, metal weatherstrips, dampproofing, ornamental iron work, wire work. Owners taking bids, due March 12th. Herman Voight, 1251 North Twenty-eighth street; F. L. Hoover & Son, 1023 Cherry street; W. W. Anstine & Co., 1218 Filbert street; Metzger & Fisher, Otis Building, and Charles McCaul Co., 1713 Sansom street, Philadelphia; Pierce Const. Co., Omaha, Neb.; Jenkins Lumber Co., Scranton, Pa.; E. P. Abbott Const. Co., 1135 Broadway, New York City; A. E. Bayley Const. Co., Binghamton, N. Y.; Doehrer Const. Co., 746 Marquette street, Chicago, Ill.; W. J. Brent, Norfolk, Va., and J. H. Wiese, Omaha, Neb., are figuring.

Garage and Laundry, Overbrook, Pa. Architect, Charles Barton Keen, Bailey Building, Philadelphia. Owner, Leroy P. Leas, Overbrook, Pa. Stone, 1½ stories, 25x28 feet, and 16x24 feet, shingle roof, electric lighting, cement floors, heating undecided. Plans in progress. Reading for bids in one week.

Court House (alts.), Sixth and Court streets, Reading, Pa. Architect, C. J. Young, 630 Washington street, Reading, Pa. Owners, City of Reading, care of County Commissioners, Reading, Pa. Brick, 2 stories, plastering, painting, tile floors, metal lath, tile work, steam heating extension. Plans in progress.

Schools (2) Rosedale and Hyde Park, Reading, Pa. Architect, Wayne M. High, 11 N. Fifth street, Reading, Pa. Owners, Muhlenberg Township School Board, Muhlenberg Township, Berks County, Pa. Brick, 2 stories, 67x65 feet, slag roof, yellow pine floors (electric lighting and plumbing reserved). Low bidder, George A. Koch, Reading, Pa.

Store (alts. and add.), Third and Market streets, Chester, Pa. Architect not selected. Owners, Propper Bros. & Co., care of William Kohn, manager, on premises. Brick, 3 stories, 40x100 feet. Contemplated. Too early for details.

Residences, Fifth and Stacy streets, Chester, Pa. Architect, private plans. Owners, S. A. Hewes & Son, 527 Welsh street, Chester, Pa. Brick, 2 stories, 14x32 feet, slag roof, pine floors, hot air heating, electric lighting. Work contemplated. Owners will sub-let.

Store and Apartments, Darby, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Vermont marble and terra cotta front, brick, 3

stories, 25x42 feet, slag roof, hot water heating, combination lighting, hardwood floors, tile and marble work. Plans in progress. Will be ready for bids in two weeks.

Family Residence and Garage, Darby, Pa. Architect, E. Allen Wilson, 1208 Chestnut st., Philadelphia. Owner's name withheld. Brick and stucco, 2 stories, 15x65 feet (two families). Garage, brick, 1 story, slag roof, hot water heating, electric lighting, tile and marble work, hardwood and cement floors. Plans in progress. Will be ready for bids in two weeks.

Hotel, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, George Shober, 305 Market street, Chester, Pa. Stone foundations, brick, terra cotta and concrete, 4 stories, 70x50 feet, slag roof, steam heating, combination lighting, tile work, hollow metal skylights, fire tower and fire doors, yellow pine floors, metal lath, trunk lift, roof ventilators, ornamental iron work. Revised plans in progress. Architect will take bids in ten days.

Still House, No. 2, Marcus Hook, Pa. Architect, private plans. Owners, Benzol Products Co., Marcus Hook, Pa. Brick and steel, 1 story and gallery, 39x35 feet, tile roof, cement floors, metal lath (lighting reserved), ornamental iron work. Owners taking bids, due as soon as possible. F. W. Van Loon, Denckla Building, Philadelphia, is figuring.

Building (extension), No. 35, Marcus Hook, Pa. Architect, private plans. Owners, Benzol Products Co., Marcus Hook, Pa. Brick and steel, 1 story and gallery, 120x47 feet, tile roof, concrete floors (lighting reserved). Owners taking bids, due as soon as possible. F. Van Loon, Denckla Building, Philadelphia, is figuring.

Flour Mill (alt. and add.), Trewick street, Steelton, Pa. Architect, Edgar M. Wambold, 1227 West Wyoming avenue, Philadelphia, Pa. Owners, John Hoffer Flour Mill Co., Trewick street, Steelton, Pa. Brick and concrete, 5 stories, 48x80 feet, stone foundations, slag and asbestos roof, cement floors, hollow metal sash, fire and kalamein doors, ornamental iron work (plumbing, heating and lighting reserved). Owners taking bids, due as soon as possible. E. E. Hollenback, Inc., 1804 Brandywine street; Whiting-Turner Const. Co., Sexton Building, Baltimore, Md., and J. Frank Sausaman, 1713 North street, Harrisburg, Pa., are figuring.

Machine Shop, Millersburg, Pa. Architect, T. H. Hamilton, 11 North Second street, Patriot Building, Harrisburg, Pa. Owners, Brubaker Bros., Centre street, Millersburg, Pa.

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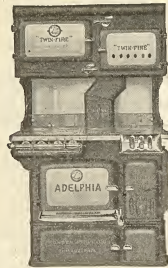
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Brick (slow burning), 1 story, 78x100 feet, slag and tin roof, cement floors, electric lighting, hollow metal sash and skylights, fire doors (heating reserved). Plans in progress.

Office Building (alts.), 1517 South Camdemon street, Harrisburg, Pa. Architect, Harry Kain, 317 Chestnut street, Harrisburg, Pa. Owners, Elliott Fisher Co., on premises. Consists of mill work and painting, electric lighting (heating reserved). Architect will sub-let.

Residence (alts.), 172 West High street, Carlisle, Pa. Architects, Fahnestock & Ridaibargh, Patriot Building, Harrisburg, Pa. Owner, Guy Carlton Lee, 172 West High street, Carlisle, Pa. Consists of interior alterations. Too early for details.

Residence, Moylan, Pa. Architect, Bart

Tourison, Land Title Building, Philadelphia. Owner, Howard W. Underwood, Moylan, Pa. Stone, 2½ stories, 30x50 feet, slate roof, hot water heating, electric lighting, hardwood floors. Plans about completed. Will be ready for bids in about ten days.

Cottages (2), Laurelton, Union County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Pennsylvania Village for Feeble Minded Women, care of State of Pennsylvania, Miss Nora P. Brown, president, Lancaster, Pa. Stone and brick, 2½ stories and basement, 77x53 feet and 100x84 feet, slag and slate roof, composition and pine floors, stone foundations, hot water heating, electric lighting, ornamental iron work. Architect has received bids.

work, roof ventilators, waterproofing and dampproofing. Preliminary plans in progress. **Pier**, Trenton, N. J. Engineers, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owners, City of Trenton, care of Eng. Dept., City Hall, Trenton, N. J. Concrete, steel and corrugated iron, 1 story, 189 x50 feet and 85x50 feet, reinforced concrete roof. Owners have received bids.

Residence (alt. and add.), Riverton, N. J. Architect, Walter H. Thomas, 130 South Fifteenth street, Philadelphia. Owner, Robert Biddle, 2nd, 517 Commerce street, Philadelphia. Consists of general interior and exterior alterations. Plans in progress.

Store (alt.), Salem, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owner's name withheld. Consists of general interior alterations, 3 stories, 25x60 feet (electric work reserved), pine floors, metal bulks. Plans in progress.

School Building, Glassboro, N. J. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owners, Board of Education, Glassboro Township, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet, slag roof (steam heating, electric lighting, plumbing and furniture reserved), rolled steel sash, wood d and composition floors, metal bath, safety treads, roof ventilators, fire and kalamain doors, dampproofing, ornamental iron work. Architects taking bids, due in about one week. Wesley B. Porch, Atlantic City, N. J., is figuring, in addition to those previously reported.

PENNSYLVANIA**Contracts Awarded**

Red Cross Work Shop, Bristol, Pa. Architects, Hancock & Hokanson, Bailey Building, Philadelphia. Owner's name withheld. Frame, 1 story, 41x96 feet, asbestos shingle roof, hot air heating (electric lighting reserved), wood floors. Contract awarded to Kolb Building Co., 30 Church street, New York City.

Stable and Spring House, Radnor, Pa. Architect, Horace Trumbauer, Land Title Build-

ing, Philadelphia. Owner, Isaac H. Clothier, Jr., Radnor, Pa. Stone and brick, 2 stories and 1 story, 21x94 feet, 23x18 feet and 26x66 feet, shingle and slate roof, pine, cement and clay floors, steam heating, ornamental iron work, wire work (lighting reserved). Contract awarded to Stacy Reeves & Sons, 2011 Market street, Philadelphia.

NEW JERSEY**Construction News**

Hotel (remodeling), Islesworth Hotel, to be known as Blackstone Hotel, South Virginia avenue and Boardwalk, Atlantic City, N. J. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner's name withheld. Consists of general improvements, interior and exterior alterations. Plans in progress. Architect will take bids in one week.

Office Building, Camden, N. J. Architect, Arnold H. Moses, 136 South Fourth street, Philadelphia. Owner, T. York Smith, 432 Market street, Camden, N. J. Brick, 3 stories, 16x70 feet, terra cotta front, slag roof, steam heating, electric lighting tile work, wood floors. Architect is taking sub-bids.

Residence, Charleston, N. J. Architect, J.

Fletcher Street, 129 South Fifth street, Philadelphia. Owner, Earl Blyer, Charleston, N. J. Frame and plaster, 2½ stories, 25x30 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Architect taking bids, due February 8th. Joseph E. Kolster, Beverly, N. J.; Garrett D. Logan, Beverly, N. J., and Hugh B. Miller, Edgewater Park, N. J., are figuring.

Public Bath and Swimming Pool, Atlantic City, N. J., \$150,000. Architect, Seward G. Dobbins, Atlantic City, N. J. Owner's name withheld. Concrete and hollow tile, 2 stories, 150x500 feet, concrete roof, tile floors, vapor heating, electric lighting, tile and marble work, rolled steel skylights, ornamental iron

Proposals

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., January 22, 1918.—Sealed proposals will be opened in this office at 3 P. M. February 19, 1918, for changes in partitions, counters, etc., in the U. S. Custom House, New York, N. Y. Drawings and specifications may be obtained at the building from the Supervising Chief Engineer or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

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NEW JERSEY

Contracts Awarded

School (Blue Anchor), Waterford Township, Camden County, N. J. Architect, Arnold H. Moses, 136 South Fourth street, Philadelphia. Owners, School Board of Waterford Township, Camden County, N. J. Brick, 1 story, 24x36 feet, shingle roof, pine floors. Contract awarded to Frank C. Ware, Glassboro, N. J.

Power House (temporary), at Destroyers Ways, Camden, N. J., \$10,000. Architect, private plans. Owners, New York Shipbuilding Co., care of Mr. Buckwalter, P. A., Camden, N. J. Frame, 1 story, 60x60 feet, slag roof, cement floors. Contract awarded to Holbrook, Cabot & Rollins, 52 Vanderbilt avenue, New York City.

School, Cambridge, Burlington County, N. J.

Architect, Wm. A. Klemann, First National Bank Building, Trenton, N. J. Owners, School Board of Burlington County, Cambridge, N. J. Brick, 1 story and basement, 68x62 feet, slate and slag roof, cement and maple floors (steam heating, electric lighting and plumbing reserved). Contract awarded to Hugh B. Miller, Edgewater Park, N. J.

Residences (75), Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Company, care of Emergency Fleet Corporation, Camden, N. J. Brick, 2 stories, 20x28 feet, slag roof, stone foundations, hot air heating, lighting undecided. Contract awarded to Mark Haller, TThird and Shunk streets, Philadelphia.

DELAWARE

Construction News

Store Building, Wilmington, Del., \$25,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner's name withheld. Brick (slow burning), 4 stories, 60x85 feet, slag roof, pine floors, steam heating, electric lighting, hollow metal sash and skylights, metal bulks, fire escapes, iron stairs, pine floors, hollow tile, metal lath, elevators. Plans in progress.

Residences (2), Clayton and Eleventh sts., Wilmington, Del. Architect, private plans. Owner, N. B. Culbert, Wilmington, Del. Brick, 3 stories, 46x16 feet, slate and slag roof, pine floors, hot water heating, electric lighting. Owner taking bids, due as soon as possible.

John E. Healy & Son, 707 Tatnal street, Wilmington, Del., are figuring.

Apartment (alt.), 207 West Sixth street, Wilmington, Del. Architects, E. L. Rice & Co., Wilmington, Del. Owner, Mrs. Charles B. Dougherty, Wilmington, Del. Brick, 3 stories, general interior alterations. Owner taking bids, due as soon as possible. John E. Healy & Son, 707 Tatnal street, Wilmington, Del., are figuring.

Residence, Wilmington, Del. Architect, private plans. Owner, E. R. Yates, Wilmington, Del. Stucco, 2½ stories, 29x24 feet, shingle roof, wood floors, electric lighting. Owner taking bids, due as soon as possible. W. D.

Haddock & Co., 804 Orange street, Wilmington, Del., are figuring.

Apartments (alts. and add.), Ninth and Orange streets, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, James T. Chandler, on premises. Brick and stucco, 2 stories, pine floors, electric lighting extension. Contract awarded to C. Howard May, 1014 Rodney street, Wilmington, Del.

Miscellaneous

Construction News

Boiler Makers' Shop, No. 2763, Washington, D. C. Architect, private plans. Owners, U. S. Government, care of A. L. Parsons, Acting Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, frame and brick, 1 story, 100x200 feet, asbestos roof, steam heating, electric lighting, rolled steel sash, fire doors, maple and cement floors, hollow tile, metal lath, dampproofing, ornamental iron work. Lowest bid submitted by Boylston Robertson Const. Co., Evans Building, Washington, D. C., \$63,226; time, 150 days.

Office Building, Spec. No. 2815, U. S. Armor Plant, Charleston, W. Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parker, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, stone and concrete, 2 stories and basement, 136x55 feet, tile and slag roof, linoleum, tile and cement floors, electric lighting, tile work, hollow tile, rolled steel sash and skylights, ornamental iron work, metal lath, roof ventilators, waterproofing, dampproofing, wire work. Owners taking bids, due February 11th. Warrenmore Co., Colonial Trust Building, Philadelphia, is figuring.

Alterations and Additions

Factory, 707-709 Filbert street, \$2,000. H. Burstein (O), on premises. J. Gorchov (C), 4116 Germantown avenue. Fire repairs.

Dwelling, 1642 South Camac street, \$300. Charles Boviochio (O and C), on premises. Brick, 2 stories, rear addition, 15x6 feet, stone foundations and alterations.

Store, 1006-08 Market street, \$11,000. S. Snellenburg (O), Eleventh and Market sts. Lam Building Co. (C), 1001 Wood street. Interior alterations.

Bridge, 132 to 144 East Allen street, \$1,400. Gorgas Piere Manufacturing Co. (O), 136 East Allen street. Turner Concrete Steel Co. (C), 1713 Sansom street. Steel, wood floor, iron sides and roof.

Bank and Offices, Fourth and Market sts., \$300. Central Trust Saving Co. (O), on premises. Roydhouse-Arey Co. (C), 112 North Broad street. Alterations.

Offices, 1208 Arch street, \$300. Poor L. & T. Co. (O), on premises. Frank W. Taylor Son (C), 259 South Fourth street. Install portable furnace.

Dwelling, 1660 Robinson street, \$500. H. J. Hendor (O), on premises. John S. Walter (C), Beechwood Park. Porcelain enameled.

Office, 235 Dock street, \$9,500. Louis B. Fortner (O), 36 Strawberry street. Philip Haibach Cont. Co. (C), 1261 North Twenty-sixth street. New brick walls and interior alterations.

Bank, 325 Chestnut street, \$6,000. Fidelity Trust Co. (O), on premises. F. L. Hoover & Son (C), 1023 Cherry street. Alterations.

Shed, Rittenhouse and Pulaski streets, \$300.

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Pennsylvania Railroad Co. (O and C), Broad Street Station. Frame, 16x32 feet, 1 story.

Store and Warehouse, 119-21 North Second street, \$2,000. Alice B. Mackie (O), Haddonfield, N. J. H. E. Grau Co. (C), 1707 Sansom street. Alterations.

Paper Factory, Nixon and Fountain streets, \$25,000. Philadelphia Paper Manufacturing Co. (O) on premises. Brown Const. Co. (C), 4600 Main street. Reinforced concrete, 1 story, 50x273 feet, slag roof.

Foundry, Bodine and Dauphin streets, \$5,500. Enterprise Manufacturing Co. (O and C), Third and Dauphin streets. Interior alterations.

Bank, Broad and South Penn Square, \$5,000. West End Trust Co. (O), on premises. John Barber (C), 220 Chancellor street. Marble work and alterations.

Service Building, Broad and Hunting Park, \$2,000. Atlantic Refining Co. (O), 3144 Passyunk avenue. Metzger & Fisher (C), Otis Building. Brick, 1 story, 7x25 feet.

Office Building, 410 Walnut street, \$1,000. John F. Dornlinx (O), 27 Cedar street, N. Y. W. J. White (C), 408 Walnut street. Low pressure steam heating.

Dwelling, 1416 North Howard street, \$355. Wm. G. Mayberry (O), 5432 Wayne avenue. John Schuster (C), 3552 North Fifteenth st. Repair fire damage.

Garage, 1604 South Eighth street, \$1,200. J. J. Simmons (O), on premises. Modern Const. Co. (C), 1615 South Eighth street. Cement floor and alterations.

Temporary Building, Tioga and Arbor sts., \$1,600. U. S. Government (O), Fourth and Walnut streets. Armstrong & Latta Co. (C), Land Title Building. Frame, 20x30 feet, ready roofing, 1 story.

Dwelling, 2434 North Broad street, \$955. John Lessor (O), Fifteenth and Shunk streets. Tony Fessoro (C), 321 North Sixty-fifth street. New flush bulk and alterations.

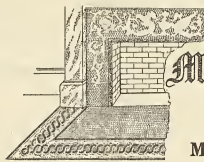
Show Room, 1157-59 South Broad street, \$800. J. Cunningham (O), 752 South Broad street. Q. Bankoof (C), 527 Cantrell street. Alterations.

Stable, 335-37 Fitzwater street, \$600. Robert McCracken (O), 530 Fitzwater street. Lansdown Const. Co. (C), Lansdown, Pa. Alterations.

Dwelling, 3323 North Broad street, \$1,650. H. J. Hinchliffe (O), 2624 North Sixth street. J. H. Hutt (C), 5199 Spruce street. Alterations.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggio give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

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THE HOUSING QUESTION.

Over three months have elapsed since the shortage in workmen's houses was brought to the attention of the Government. During that period the question has been under consideration by the Council of National Defense, but at this moment the nation remains in ignorance of its cogitations and looks in vain for any evidence that the problem has been grasped in any sense commensurate with its magnitude.

As one tries to divine the reason for this, two prime factors seem to evolve out of the mass of testimony and speculative criticism. First, we have not the background which enabled England to meet her own similar problem with a foresight and an energy which are revealed in the article of Mr. Ackerman which immediately follows. Secondly, the problem, at some point in the Council, has encountered a mind not possessing the imagination to visualize either the necessitous character of modern war, the scale of its demands, or the methods by which, and by which alone, we may stimulate our industrial production to the maximum. In these days one hesitates long before resorting to criticism of any of our national war activities and the methods by which they are administered. Everyone desires to be patient, to realize the intricate nature of our problem and its consequent requirement for time in which to organize and co-ordinate all the ramifying factors. But the time has assuredly come when it becomes a national duty to point out that industrial production cannot be stimulated by machinery alone, and that failure to grasp the problem of providing houses for workmen, in which they may enjoy a measure of comfort and rest, is failure to make war as England and Germany are making it.

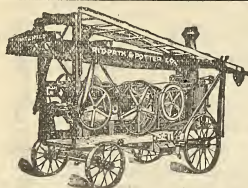
In Washington, one senses the feeling of timidity in meeting the problem. It is said

that "the country is not ready" for any such far-reaching solution as England found it necessary to adopt. One hears that "our problem is different," and that we must meet it in our way. All these things contain a modicum of truth, but the fact is that we are not meeting the problem at all, except in sporadic cases, and that even then we are not meeting it as we should.

Allowances must be made for the confusion into which the question has been thrown by the multitude of selfish interests which have sought advocacy of this plan or that, according as it affected their own individual interests. Nothing has contributed more toward obscuring the really fundamental factor of Federal recognition of the problem than the thrusting forward of every conceivable sort of scheme by which houses might be built or workmen might be sheltered. Instead of throwing light on the problem, they have shadowed it with doubts and suspicions, and we are the more emboldened to say this since President Wilson himself, in his message to Congress, took occasion to indicate that the profiteers have not all been regenerated by war. They have shown themselves in the discussion of homes for workmen, as elsewhere, and have done a damage to the nation of which time will show the full extent.

We regret sincerely that the task of placing this issue before the people of the United States should fall to a publication which serves the organized profession of architecture in this country. We recognize that in small minds we too shall engender a suspicion of selfish purpose. But we dismiss the thought and the fear as unworthy of consideration. Our national interest has been too clearly demonstrated to cause us a moment's hesitation in stating our faith, and we believe it to be our solemn duty to point out the essential fact that it was not until England dealt

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DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.



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broadly with the question of workmen's houses and workmen's comforts and workmen's rights to rest and recreation, that she began to attain the necessary volume in her war-time production of necessities. This is a truth which no sane man in England will deny.

It is also stated in Washington circles that those in charge of this matter are insisting upon a narrow definition of what constitutes a war emergency. The problem, so it is said, is one which only relates itself to the immediate plant where munitions are being made. To us, this strict line of demarcation is only another evidence of lack of imagination. Who can say where production of war munitions is being sacrificed by a house shortage? It may be at the mine or the ore-bed, or at any one of ten thousand points where the little streams rise to fill the river of industry. It is scale that we lack. It is imagination of which we are lamentably short. And we say, and without hesitation, that this is a problem which can be better visualized by men whose imagination is their stock in trade than by those whose vision is confined within the realm of capital investment and interest. War is not a process of saving money—it is a test of a nation's imagination in spending it.

Again we hear it stated that the crux of our problem is to meet emergencies in any temporary manner such as will accomplish the result. It seems to be taken for granted that the mere provision of beds and roofs will satisfy all requirements. As against this, we may point out the one feature of English experience which stands out above all the others, and which is revealed in the illustrations which accompany Mr. Ackerman's article. It was not until England began to build good houses for workmen with families; good boarding houses with good comforts for single men; halls, churches, institutes, theatres, and recreation facilities, that she began to be able to hold her workers at their task and to obtain from them that tremendous volume of munitions without which she was helpless in the face of an enemy which had spent years in preparing for these very things. Temporary houses may be a solution in certain rare emergencies. On the whole, they are no solution, and they will involve a national loss in industrial production and a national waste when the time comes to demolish them.

Is it true that the United States is not

ready to meet such an emergency with as high a degree of intelligence and skill as England employed? We do not believe it. We affirm, on the contrary, that unless it is met with imagination and with a conception of its scale such as will insure the one result sought, the nation will visit its indignation upon those who deal feebly and unintelligently where they should deal strongly and brilliantly with a problem of vital national import.

As this question arose and took prominence through a war emergency, although it is one which has been with us for a century, it seems only to complicate the problem by pointing out that the manner in which we do deal with it will affect our future more than any other thing connected with the war. But this is a fact, and all doubt of it will vanish when one has finished reading the story of England of the present and England of the future, as narrated on the following pages.

We believe that only by the appointment of a Workmen's Home Administration (we abominate the word "housing") with broad powers, directed by imagination and not by narrow practicality, can the United States begin seriously to deal with the paramount problem of building ships, making guns, munitions, and all the war necessities upon which our success depends absolutely.—"Journal of American Institute of Architects."

SKILLED MECHANICS IN THE WAR.

To the average lay mind it has been difficult to fully realize the complexity of modern warfare. Only after much thought and consideration of contemporaneous history is it possible to visualize the vast forces of skilled man-power required to maintain a large field force at the maximum of military efficiency. In order to attain this end great bodies of almost every type of skilled workmen are essential, not only for the necessary work at home, but also for actual military duty at the foreign bases or immediately in the rear of the fighting fronts.

The conflagration that has now embroiled the greater portion of the civilized world might well be termed a war of the builders, as the building industry, in all of its respective branches has been called upon for such a substantial part of the work involved. The side that is in the position to mass the greatest force of engineer and mechanical troops and furnish to them the best materials and

most modern equipment, with it will rest the balance of power that will go far in insuring ultimate victory. Efficiency in the Quartermaster's Department of a modern army is fully as essential as highly trained and equipped combat units.

At the present time the recruiting service of the United States Army is making a strong plea for the voluntary enlistment of a great force of skilled mechanics for practically every line of industrial work. In this group of men the major portion desired are workmen familiar with the building trades in almost all of its manifold branches. Now, the nation needs highly skilled mechanics as badly as it needs machine gunners, sharpshooters, aviators or other first line troops, for these mechanics are desired for work that will make possible efficient maneuvering of the actual fighting forces. Without an adequate number of skilled men behind the fighting lines, the strength and efficiency of the combat troops would be greatly impaired.

The allied building trades of this nation are now being called upon to furnish their share of the skilled enlisted men for the work required at the foreign bases. These men must be supplied in addition to the great number that already have been or soon will be called to the colors by the terms of the selective draft. The new enlistments must be voluntary, from able-bodied men between the ages of 18 and 45 years, and without dependents, who out of a spirit of patriotism and a firm desire to witness the triumph of democracy, will heed the call of the nation. The United States Army vitally needs skilled carpenters, masons, brick layers, concrete workers, plumbers, steam fitters, electricians, tin-smiths, iron workers, painters and other mechanics and artisans.

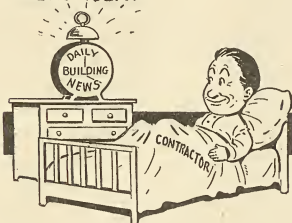
What will be the answer of the building trades to this call? The question is now being answered by the number of men who are daily volunteering their services at the various recruiting offices throughout the country. Surely, an industry that has already accomplished so much at home in the preliminary preparations for the entry of the United States into the conflict, that has subjugated its personal interests in an endeavor to aid the Government in its war-building program, that has suffered hardships and financial losses through its patriotism and willingness to serve, could do no less than give the best men in its employ in order that this great country might emerge from the war victorious and assure a permanent world democracy.—"New York Real Estate Record."

GOOD ROAD RECORDS IN UNITED STATES.

At the close of 1916 there were 2,455,761 miles of rural roads in the country, of which 287,047 miles were surfaced in some way. In other words, only 11½ per cent. of the roads were other than dirt, which shows that the great road problem for many years will be

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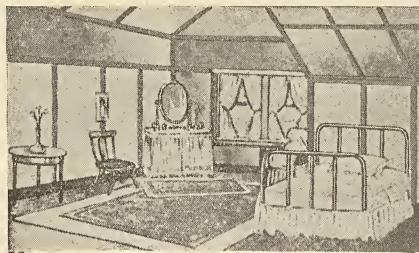


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to secure the most economical and efficient improvement of dirt roads.

Massachusetts has the greatest percentage of her roads surfaced, being 47.6 per cent. Then comes Indiana with 42.5, New Jersey with 40.5, Ohio with 36.5, Rhode Island with 34.5, Kentucky with 23.2, New York with 22.7, Connecticut with 22, and California with 20.2 per cent. Indiana and Kentucky hold their prominent positions on account of the extensive use of gravel. The figures refer to all kinds of surfacing and are not restricted to the generally called permanent pavements.

The smallest percentage of surfacing has been done in Oklahoma, where 99.3 per cent. of the roads are dirt. Other States with low percentages of surfacing are South Dakota with 9.8 per cent., Iowa with 1, Kansas with 1.3, North Dakota with 1.6, and Nebraska with 1.7. The excellent maintenance of many of the dirt roads of Iowa, however, makes riding and hauling over them easy except during a short period in the spring.

During 1916, \$272,634,424 were spent on the roads of the country, plus statute and convict labor worth about \$15,000,000 and about \$15,000,000 paid out as interest on road bonds. The labor and interest items cannot be estimated accurately, but the total expenditures on roads in 1916 was over \$300,000,000. The cash expenditures in 1915 amounted to \$266,976,399, and in 1914 to \$240,263,784.

STUDY THE ADVERTISING PAGES.

The average reader does not pay very close attention to the advertising pages unless he happens to be particularly interested in some product or is in the market for equipment or material. He is missing a part of scientific literature which offers suggestions as practical as the reading pages. He is also losing an opportunity of studying a subject which bears the most important relationship to every business on earth. No matter what line of work you may be engaged in, a knowledge of publicity and salesmanship is valuable. Every form of occupation to be made successful depends upon a degree of salesmanship. Study the advertising pages. They represent an expenditure of time, thought and money, which makes them well worthy of your attention.—"Municipal Engineering."

Without energetic effort a man must remain in a rut and can never expect to share with his hustling, up-to-date competitor. Quoting the words of a gifted scribe: "Health attends the man who acts. Wisdom guides him. Hope frees him. Joy helps him. Power moves him. Progress marks him. Fame follows him. Wealth rewards him. Love chooses him. Fate obeys him. God blesses him. Immortality crowns him."

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

A certain wallboard man advertised in the Guide for awhile and then dropped out. We've had a dozen inquiries since then, asking for his address—every inquiry from a cash buyer. This is a common occurrence. It's hard to make some advertisers see the vital importance of a standing "ad."

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

BELGIAN METHOD OF PROTECTING WOODWORK IN MASONRY.

The unfortunate results which often follow the imbedding timber into newly built masonry walls is commented upon by La Semainé des Constructeurs, and attention is called to the fact that oak beams, even of the twelfth century, are frequently found in good state of preservation, and commending the builders who save the oak beams taken out of old buildings and use pieces from them as a protection for new woodwork.

"In Belgium it has been customary to nail upon all sides of the joists where they enter the walls, thin pieces of old oak forming all around it a sort of covering or a small oaken box. Old oak is always taken in preference, and to be of use it must be absolutely seasoned and free from sap.

"There are also certain other insulating substances than oak. Some masons wet clay in a little water and cover those portions of beams or joists that will come in contact with masonry; but the very best insulation is atmospheric air, especially if it be dry. In order to preserve the woods by means of air it is necessary to place between the beams and brickwork plugs or loose pieces, which keep the lime away from the wood and permit a circulation of air. Beams of soft wood can advantageously be set upon fragments of perfectly dry hard brick or pieces of tile, allowing the air opportunity to circulate between them and then around the beam. We prefer, however, the pieces of oak as referred to above, since the dampness or condensation of moisture in the atmosphere is less liable to be deposited on the wood than brick or tile."

LOCAL BUILDING MATERIALS.

One phase of the present situation is the difficulty of transportation. This will mean that local building materials will be used as far as possible in each community. Local interest is likely to be developed in materials which have not hitherto been given special consideration.

A new process for making cement brick, on the job if desired, and giving them a waterproof surface and at the same time making a texture of the tapestry and moss finishes, in any color, promises to become a boon to the building industry in this time of special requirements.

From the time of the early use of modern concrete builders have constantly tried to find some form of building block or brick which should give a satisfactory building unit for concrete. Since sand and gravel are found on so many building sites, transportation is saved if the units can be made on the job. But in order to do this in a practical way no complicated machinery can be employed.

This new concrete brick can be obtained as can other brick, in quantity; but it can also be made on the job. The total capacity of two machines working together, tended by

three men, is given as 5,000 per day of faced brick, or 10,000 per day of common cement brick.

The machines, each occupying not more than six feet square of space, are operated by a single man, with one helper sufficing for both machines. This helper works from a mixing box where the sand and cement are mixed, seemingly only dampened. The sand is delivered in wagons direct to the mixing board, and the cement is stored but a few feet away. A space 25 to 30 feet square conveniently accommodates the entire plant, the brick being carried to drying space a few feet away and ricked up to season. The brick resulting withstands a pressure of 3,000 pounds to the square inch, so each brick has a crushing strength of forty tons.

The brick without coloring is steel gray, and this is classed as the common. The coloring process is carried out through use of mineral powders which are used in connection with the waterproof facing. It is thus possible to secure any coloring desired—a color through the mineral agencies that will never fade.

UNNECESSARY FIRE HAZARDS IN BUILDING CONSTRUCTION.

In case of fire, wood is often condemned when actually the fault is not with the material, but with the careless construction and disregard of fire hazard. The cost of proper construction in relation to the fire hazard adds only a small percentage to the total cost of the dwelling; yet gives returns in lower insurance rates, and greater safety far in excess of the additional expense.

Intelligent selection of lumber to insure the proper kind and grade for the particular locations, or different parts of a structure is essential.

With proper selection should come the consideration of strength of the different kinds of timber. In all cases careful workmanship in framing and placing is necessary.

A consideration of great importance is proper firestops or fire barriers in dwelling house construction. This is one of the actual protective measures which is not as generally known or recognized, but is fully as important as safe chimney, smokepipe, and fireplace construction.

Dwellings are usually the least protected of any class of buildings, and when of flimsy, improper construction constitute an unnecessary hazard. Wood remains the least expensive and most universally available material. At the same time it responds to architectural treatment in a way which introduces a strong appeal on the ground of beauty and sentiment.

Since wooden homes will continue to be built through the indefinite future, special attention should be given to their proper construction, and to the rigid elimination of unnecessary fire risks.

If a fire starts from a defective chimney or

flue and burns a wood shingle roof, it would seem much more logical to pass an ordinance rigidly controlling the construction of flues and chimneys than one prohibiting the use of shingles. However, since the burning shingle roof can be seen, legislation is directed against it, and not against the defective chimney.

FIRE-RESISTIVE TREATMENT.

One of the late developments in the research concerning wood which is most far reaching in its possibilities is that relating to the treatment, not only of wood but of almost any material which renders it fire-resistive if not fireproof. The Lumber and Paint Associations have been working with the Government, in co-operation with private individuals, upon processes which shall give a wooden shingle roof protection which is fire-resistive and at the same time can be produced at practical commercial prices. The results have been most gratifying. The formula for this paint is held by the Paint Manufacturers' Association and is being put on the market. Commercial "Fireproof paints" have been on the market for some time which have stood severe tests.

One would expect the announcement of fire-resisting paint to create a certain amount of excitement in the building world, but a certain amount of time must elapse and proofs multiplied to show the actual results in the use.

GLAZING WITH METAL STRIPS.

Glass panes can be held in place without putty by the use of a flexible metal or rubber strip like a partly open tube laid upon the pane and held down by a set of clamps spaced along the pane, says a writer in "Building World." First apply the pane of glass so as to fit it into the usual recess, then lay the prepared metal or spring strip along one side and screw on a plate at the corners of the pane and say one at the middle, these being flat plates with a somewhat incurred edge where they take hold of the spring strip, and are screwed on the woodwork at the side of the pane with the curved ends projecting out and over the pane so as to inclose the strip. The latter are, of course, put on at all four sides of the pane.

A double pane with air space between can be applied by using a deep recess and just laying a pane, then the strip, next a second pane and finally a strip that now comes flush with the woodwork and can be fastened down by the metal plate as before.

All advertising pays—even that which is poorly constructed. A bad ad. is better than no ad. at all. It is worth all that it costs in the competitive world of the present day, merely to keep one's name where the possible buyer cannot help seeing it. To be out of sight in the commercial world is to be out of mind.

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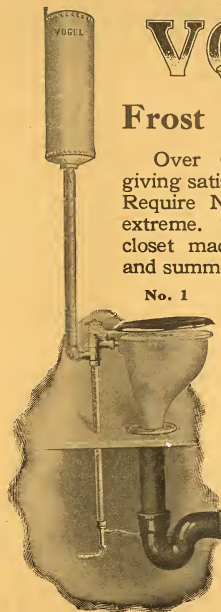
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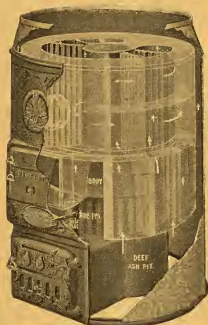
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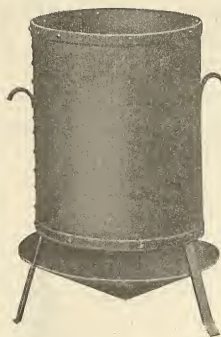
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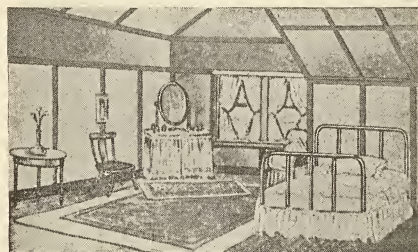
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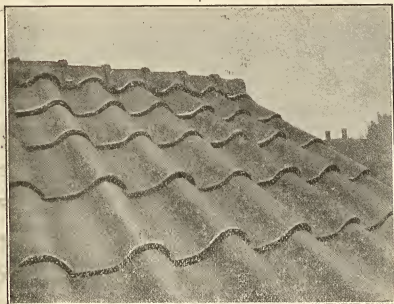
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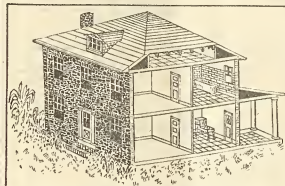


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BUILDERS' GUIDE

VOLUME XXXIII
Number 7

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

PHILADELPHIA
February 13, 1918

BUILDERS' GUIDE

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and Builders' Guide

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As The Editor Sees It



BY resolution of the Board of Directors at its meeting on January last, the next annual convention of the American Institute of Architects will be held in this city on April 24, 25 and 26. In the circulars which were sent out to all the Chapters, asking for an expression of opinion as to the advisability of holding a convention this year, and, in the event one was held, the form it should take, there were outlined two plans. The first of these seemed to be the preference and has been adopted. The plan provides that each Chapter having six or less delegates shall send one, while larger Chapters shall send one delegate in four.

The following important matters were among those considered by the Board: Amendment to Circular of Advice and Canons of Ethics relative to advertising.

Report of Public Building Commission.
Execution of building contracts by an architect.

War service work of the Institute.
Report of Committee on Building Conditions in the United States.
Suggested amendments to Institute Constitution and By-laws and Chapter Constitution and By-laws.
Fellowships.

* * *

A PROPOSAL for a Limited Convention, with the Continuation of the Present Officers Until the Convention of 1919.

In this national emergency the under-

signed believe that the Institute is not justified in holding a regular Convention with all the expense involved, and that it would perhaps be well to make no change in the officers.

A limited Convention could be held with little or no expense, and routine business attended to. The election of officers is routine business, and such election, in the opinion of our counsel, must be held.

We believe it is to the interest of the profession to continue the present officers. To re-elect the President and the retiring Directors requires a change in the By-Laws, Article 10, Section 2, and Article 11, Section 1. To accomplish this we propose a change in the By-Laws, and, when this is passed, the nomination of the retiring officers.

We propose that the By-Laws be amended by the addition of the following Article 17:

"The provisions of Article 10, Section 2, and Article 11, Section 1, relating to eligibility to re-election of President and Directors are suspended for the duration of the war."

We nominate the following: For President, John Lawrence Mauran; First Vice-President, C. Grant LaFarge; Second Vice-President, W. R. B. Willcox; Secretary, W. S. Parker; Treasurer, D. Everett Waid; Directors: Charles A. Coolidge, Charles A. Favrot, Elmer C. Jensen. These nominations were signed by: Arthur Wallace Rice, R. Clipston

Sturgis, Henry H. Kendall, J. Randolph Coolidge, Jr., Harry J. Carlson, Frank W. Ferguson, C. H. Blackall, Charles D. Maginnis, of the Boston Chapter; M. B. Medary, Jr., John P. B. Sinkler, C. L. Borie, Jr., Frank Miles Day, of the Philadelphia Chapter; Wm. A. Boring, of the New York Chapter; S. S. Labouisse, of the Louisiana Chapter; T. C. Klipstein, Wm. B. Ittner, Theo. C. Link, G. F. A. Brueggeman, James P. Jamieson, of the St. Louis Chapter.

* * *

THE Seventh Annual Convention of the National Association of Master Builders' Exchanges, held at Pittsburgh on Wednesday and Thursday of last week, took up for discussion a number of questions of importance to the building industry. Sullivan W. Jones, associate editor of the *Journal of the American Institute of Architects*, favored the convention with an address on the subject of the quantity system of estimating.

The American Institute of Architects issued last August an invitation to six professional societies, four contractors' associations, and nine trade organizations, whose members were engaged in either professional or contractual capacities in the building industry, to appoint representatives to confer with the Institute's representative on the Quantity System, or some other measure for improving conditions surrounding competitive bidding for construction contracts.

The Conference was called for October

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15, 1917, at the Octagon, Washington, D. C., and was attended by representatives from the Society of Constructors of Federal Buildings, the American Society of Civil Engineers, the Bureau of Yards and Docks, the Supervising Architect's office, the Government Contractors' Association, the National Association of Marble Dealers, the International Association of Cut Stone Contractors, the National Association of Sheet Metal Contractors, the Automatic Sprinkler Association, the Quantity Survey Company, and the American Institute of Architects. The other societies and associations had, with but three exceptions, two of these being architectural societies, appointed representatives, who, however, were unable to be present.

* * *

UPON the close of the discussion, the following resolution was unanimously adopted:

"Resolved, First, that it is the sense of this meeting that a permanent organization should be formed for the promotion and adoption of the Quantity System of estimating; and that the organization should also take under consideration all other questions of procedure in the award of contracts.

"Second, that the Chairman appoint a Committee to prepare a draft on a proposed Quantity System to be presented to a second Conference to be held at the call of the Chair, and that all professional societies and contractors' associations interested in the building industry be invited to appoint delegates to attend the second Conference."

The Chairman has appointed the following as members of the Committee provided for in the above resolution: Henry H. Quimby, representing the American Society of Civil Engineers; Fred G. Webber, representing the National Association of Builders' Exchanges; F. W. Ginder, representing the Supervising Architect's office; Wm. Graves Smith, representing the Quantity Survey Company.

Mr. Jones's address was listened to with the greatest interest, the consensus of opinion being that the quantity system will ultimately come into general use. Mr. Jones explained that "The Quantity system of estimating" is the method of taking competitive bids upon the basis of bills of quantities of the materials required for a given space of construction, the bills of quantities being prepared by a professional quantity surveyor. He said that under the quantity system, the bidder merely prices the bill of quantities and the total of the extended item price constitutes the bid.

THE last day's session was the liveliest of the three, a set of resolutions presented by the Philadelphia delegation being the cause of the uproar.

On behalf of the Master Builders' Exchange of Philadelphia, Attorney W. B. King, of Washington, presented the resolutions, which were in part for the purpose of putting the national association on record as favoring the creation of a Tribunal of Arbitration to adjust all labor questions, where the mutual rights of employers and workmen were to be discussed, determined and settled upon principles of reason and justice; dealing with the question of continuing the work of construction while the disputes were being discussed by the arbitration board; the adoption of means whereby the decisions of the board would be enforced, and the disrespectful methods to prolong strikes would be forewarned.

The resolution was supplemented with the request that a committee of five be appointed to confer with representatives of international labor bodies, as well as the Department of Labor at Washington, with a view of affecting the purposes covered by the resolution.

* * *

AS soon as the resolutions were read there were protests from all over the hall, many of the Western delegates claiming that it would eliminate all controversy with non-union men, and, as one said, "We have enough statements and ultimatums from union men, but never a word from non-union men, whose word is just as good as his work is efficient as a union man."

The matter was finally adopted, and the following committee appointed:

C. W. Bernhardt, Atlanta, Ga.; F. M. Harris, Philadelphia; A. J. Dietrich, Baltimore; S. P. Trimble, Pittsburgh, and H. A. Pfohl, Winston-Salem, N. C.

The place of next year's meeting developed a spirited fight between Milwaukee and Tulsa, Okla., the former winning out.

The Board of Control for the year was given out as follows:

R. K. Cockrane, Pittsburgh; John F. Rainer, Baltimore; F. M. Harris, Philadelphia; C. J. Kelly, New York; A. A. Arnold, Des Moines; C. C. Schroeder, Grand Rapids; V. R. Gould, Omaha; J. P. Cullen, Janesville, Wis.; Ralph McLaren, San Francisco; H. N. Yergesson, Cincinnati.

Failure of Congress to provide the country with a scientific budget system called forth tart remarks from Dean J. T. Holdsworth, of the University of Pittsburgh, claiming that the United States Government was the greatest corporation in the world, without a trace of a budget,

and he urged the builders and business men of the country to demand it.

* * *

COLONEL John R. Wiggins, of this city, was elected President of the National Association of Builders' Exchanges. Other officers elected were: First vice-president, Charles W. Bornhardt, of Atlanta, Ga.; second vice-president, C. J. Dubel, of Sioux City, Ia.; treasurer, B. M. Freeman, of Columbus, O.

President Wiggins has appointed Charles Elmer Smith, former secretary of the Philadelphia Builders' Exchange, Secretary of the National Association.

* * *

ACCORDING to a news dispatch from Washington, a director of housing to have entire administrative charge of the program, will be announced within a few days by Secretary of Labor Wilson, as soon as he received the acceptance of a prominent man already selected for the place.

Entire control of the problem of housing workers in all war industries has been delegated to the Department of Labor.

In the meantime plans of administration are being worked out by the Labor Advisory Council so that the director may begin work immediately. It is planned to have the organization ready so that there shall not be a day's delay when Congress provides funds.

Assisting the administrator will be a policies board composed of his subordinates, each dealing with a separate phase of the problems legal, financial, construction, real estate, transport, social, etc. On their advice he will decide the questions brought by each manufacturer, whether transportation shall be relied on to provide workers from nearby towns or whether houses shall be built at the site of the plant, and if the decision is to build, how extensive the construction shall be and of what material.

Every precaution will be taken by the Department of Labor to safeguard the social and living conditions of workers who volunteer their industrial service.

* * *

HOUSING construction at shipyards still will be supervised by the Shipping Board for the department, in agreement with the understanding reached at previous conferences.

An appropriation of \$50,000,000, to be used by the Secretary of Labor in housing laborers employed on war contracts, was proposed in a bill introduced recently by Representative James P. Maher, Democrat, of New York. Mr. Maher explained that its purpose is to supplement legislation already passed by the Senate and favorably reported to the house, to provide housing facilities for

men employed on Government shipbuilding.

"There is lack of housing facilities for men employed in industrial centers producing supplies needed by the War Department," said Mr. Maher, "just as there is lack of housing at shipbuilding yards. In fact, the needs in each case are very great, and demand immediate attention.

"My bill proposes to give the Secretary of Labor power to commandeer houses and lands and use them in sheltering workmen engaged on war contracts, so that the work of the war program may not be halted at any point." The bill was referred to the Committee on Labor, of which Mr. Maher is chairman. He is to refer it to a sub-committee which will begin consideration of the bill at once, with a view to early action upon it in the house. It is understood that the bill is endorsed by the Secretary of Labor and the President.

* * *

SPURRED by the statement that was shown him in Washington quoting an official of this city as saying that owing to the Hog Island investigation the housing plan for Elmwood section would be held up indefinitely and perhaps sidetracked completely, E. N. Hurley, chairman of the Emergency Fleet Corporation, said that the plans for building Government houses for the employees at Hog Island had been completed.

"The houses will be built as planned," said Mr. Hurley. "The only delay is that now occasioned in the House, where objection was made to prompt consideration of the measure. We shall not go ahead until we can get authority to commandeer land in Philadelphia and other places. This authority is contained in the bill now before the House. I regard it as absolutely essential that the Government should have power to take over land so that it will not be forced to submit to land sharks.

"As soon as the bill is passed granting such authority we shall go ahead in Philadelphia."

Chairman Hurley's statement was occasioned by the words of an official of the city, who has been active in connection with the location of the houses in the Forty-fifth Ward. He said: "It is altogether probable that an entirely new plan with reference to this city, and an entirely new commission will be appointed to handle this proposition."

"All the work that has been done, all the planning and all of the virtually completed arrangements have been predicated upon the belief that Congress would quickly approve the sum of money necessary. Now it looks as though Congress was going to take the stand that fifty mil-

lions of dollars is too huge a sum to be spent upon a housing proposition, which, it takes the attitude, is not, strictly speaking, a shipbuilding proposition."

* * *

THE War Emergency Committee of the Builders' Exchange has sent letters to all engaged in the building business and to dealers in and manufacturers of material asking information to be compiled and indexed for the use

of the United States Government, which is to become a permanent feature of the Exchanges' activities after the war is over.

Information is wanted concerning material handled, quantities in which it can be furnished, time, whether from factory or warehouse, trade names of specialties, name and address of local representatives, and such additional information as may be of value to either the Government or those who contemplate building.

EDITORIAL NOTES

The Wilmington, Del., Housing Company has been incorporated with a capital stock of \$600,000. It has elected officers and expects some aid from the National Government in the erection of houses in that city. The company proposes to build at least 1,000 homes in Wilmington for the accommodation of workers in the adjacent shipyards and munition factories.

* * *

The total amount of timber cut on the National Forests in the fiscal year 1917 was 840,612,000 board feet, as against 714,505,000 board feet in 1916.

* * *

At a recent convention at Memphis, Tenn., the American Hardware Manufacturers' Association was organized by the consolidation housing of workmen at the various shipbuilding plants. It is to be hoped that buildings of the American Oak Manufacturers' Association, and the Gum Lumber Manufacturers' Association. Officers elected for the ensuing year were as follows: R. L. Jurden, Memphis, president; W. H. Russe, Memphis, first vice-president; B. F. Dulweber, Moorehead, Miss., second vice-president; William Pritchard, Memphis, treasurer.

* * *

Several Administration officials, including Secretary of War Baker, Secretary of Labor Wilson and Chairman Hurley, of the Shipping Board, endorsed the Fletcher Bill, which provides for an appropriation of \$50,000,000 for of a permanent character are erected, so that labor will be obtainable and the industry prosper.

* * *

The sixteenth annual convention of the National Association of Marble Dealers was held at the Murray Hill hotel, New York City. Election of officers for the ensuing year resulted as follows: President, J. J. McClymont, Grant Marble Company, Milwaukee, Wis.; vice-president, I. P. Morton, Bradbury Marble Company, St. Louis, Mo.; treasurer, James M. Taylor, Taylor Marble Company, Chicago, Ill.

* * *

Fire losses and the cost of fire prevention in the United States amount annually to \$450,000,000, or more than the total American

production of gold, silver, copper and petroleum in a year.

* * *

The National Crushed Stone Association was organized at Columbus, Ohio. Representatives from ten States of the Central West were present, and participated in the organization. A. J. Blair, Milwaukee, was chosen president, and F. W. Connell, Indianapolis, secretary.

* * *

Pennsylvania and Atlantic Seaboard Hardware Association and the New York State Retail Hardware Association will hold a joint annual convention and exhibition in New York City, February 12, 13, 14, 15, 1918. Headquarters at the Hotel Astor.

* * *

The Chester Shipbuilding Company, Chester, Pa., has leased a large garage in that city and equipped it with beds for the accommodation of workmen for whom they have been unable to procure suitable housing accommodations.

* * *

The New York State Association of Builders held its twenty-second annual convention at Newburgh, N. Y., and it proved a very successful one. There was a large attendance of builders from all the cities and principal towns of the State, and the results of the meeting were satisfactory. The Executive Committee held its regular meeting prior to the convention and submitted a report embodying a number of suggestions or recommendations, most of which were adopted by the convention. The election of officers resulted in the following selection for 1918: President, G. C. Schierer, of Buffalo, N. Y.; first vice-president, Fred T. Youngs, of New York City; second vice-president, E. K. Fenno, of Syracuse, N. Y.; third vice-president, C. W. Luther, of Rochester, N. Y.; secretary-treasurer, J. M. Carter, of Albany, N. Y.; chairman Executive Committee, L. M. Harding, of New York City.

* * *

American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building, New York City.

The Ohio Macadam Association, at its annual convention, held at Columbus, Ohio, elected the following officers: L. H. Hawblitz, Toledo, president; E. T. Paul, Lewisburg, first vice-president; J. A. Moore, Bellevue, second vice-president; A. P. Sandles, Columbus, secretary; W. H. Hoagland, Columbus, treasurer; A. A. Hall, Piqua; Allen Patterson, Lima; W. H. Hoagland, Columbus, Executive Committee. The annual banquet of this association was the largest and most representative the association ever held. A. P. Sandles, secretary, officiated as toastmaster, and among the speakers were Judge Hogan, of the Ohio Supreme Court; President P. L. Campbell, of Oregon University, and others. Road building and its maintenance as a war necessity was the principal theme.

* * *

The Western Paving Brick Manufacturers' Association held its annual meeting in Kansas City. The officers elected for the ensuing year were: A. W. Shulthis, president; R. E. Jackson, vice-president; G. W. Thurston, secretary; E. D. Whitford, treasurer.

* * *

New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the management of Louis W. Buckley. The floor space to be occupied equals 100,000 square feet.

* * *

The National Slag Association was organized at Columbus, Ohio, a few days ago, and has officers as follows: F. A. Sarstedt, Cleveland, president; F. E. Miller, Youngstown, vice-president; H. J. Love, Youngstown, secretary; W. D. Brewer, Pittsburgh, treasurer.

* * *

The total number of labor disturbances show slight change over the condition that has maintained for the last three or four weeks. There is evidence of considerable unrest in nearly all lines, although fortunately the building trades are less affected by these disputes than are many other branches of business. Among the places where strikes have recently been reported are the following: Manchester, Conn., general strike of building employees; Memphis, Tenn., carpenters' strike for higher wages; Miami, Fla., painters; Saxtonville, Mass., painters. Doubtless a number of other troubles have occurred recently in the building trades, which are not included in the above list. As a general thing, however, the situation is comparatively quiet, and speedy adjustments of troubles as they arise is the rule.

* * *

Although the material markets are generally quiet the tone is good and prices firm. The present dullness is attributed more to the inclement weather that has maintained than to any other one factor, and just as soon as this settles it is predicted that the situation among the dealers in materials and supplies will be greatly improved. At this writing there is every indication that commodity prices will hold to their present high levels. No recession will come while the difficulty in obtaining adequate fuel supplies continues or

while the transportation situation is in its existing chaotic state. Both of these factors are acting to prevent flooding the market even with the extremely slight demand. Dealers in some material lines are carrying short or broken stocks—this particularly to lumber and glass dealers. While the demand remains at the present low ebb there will be no material change in the price situation, but should it suddenly increase it would be difficult to predict how high prices might soar.

* * *

Edison Electric Appliance Co., Inc., a new corporation, has taken over the entire business of the Hot Point Electric Heating Co., the Hughes Electric Heating Co., and the household heating device business of the General Electric Co.

* * *

Colonel Guy E. Tripp, head of the Division of Production and Ordnance Department, has announced the appointment of W. H. Marshall

as his assistant in that department. Mr. Marshall was formerly president of the American Locomotive Company, and is now associated with J. P. Morgan & Co., where he was on the staff of E. R. Stettinius, in the Munitions Department of that firm.

* * *

E. A. Baily, secretary to the vice-president of the Edison Electric Illuminating Company of Brooklyn, is now in Washington, D. C., for an indefinite period, where he is associated with the section on national organization of the war savings committee of the United States Treasury Department. Through this committee the Government placed on sale on December 3, 1917, \$2,000,000,000 of war savings and thrift stamps. Mr. Baily is devoting his time in interesting public utilities, including electric lighting, natural and artificial gas, water and street railway companies, in establishing booths for the sale of the new thrift and war savings stamps.

SAFETY IN SCAFFOLD CONSTRUCTION

Elmer Spahr, President Pennsylvania State Conference of The Bricklayers, Masons and Plasters' International Union, in "National Builder."

Little has been written concerning scaffolds with reference to safety and efficiency, considering the wide use of scaffolds and that many accidents are caused by faulty construction or over-loading.

When it is considered that no building can be constructed without the use of a scaffold, of some form or other, and that the men employed at the building trades perform nearly all of their labor on a scaffold, there should obviously be much thought given to careful construction.

The fact that scaffolds are merely temporary affairs, to be used only for a short time, should not preclude the idea that they should be as carefully planned as the building itself. In most cases the planning and building of scaffolds are usually done with the easy removal of the scaffold after it has served its purpose as the principal object. On this account many minor and some disastrous accidents have occurred.

One must realize that the mechanic cannot render efficient service while working on a staging that is weak or narrow or where the footing is very uneven, because under such conditions his brain is crowded with thoughts concerning his safety. This makes it impossible for him to concentrate his attention on the work he is performing.

With the exception of creating a few patented scaffolding devices, safety engineers have given this matter very little attention, although other lines of industry have received careful thought and planning to prevent the worker from injuring himself or being injured while engaged at his daily labor.

Unlike many of the other victims of industrial accidents, the workman injured from a scaffold is in no way responsible for the accident, as the scaffold is usually erected by

another workman who does not intend to work from it, but who does intend to wreck it when it has served its purpose. Personal observation has demonstrated that seldom is only one person injured in the collapse of a scaffold, but frequently several, and there are instances where six to ten men have been known to go down in a scaffold fall.

The bricklayers or masons, for instance, when ordered upon a scaffold by their foreman, assume that the superintendent has provided for their safety, when it may be that the person who erected the scaffold did not consider the weight of numbers of bricks, hods of mortar and cement, and the additional live load of mechanics and their helpers. The resultant stress may be too great for an upright, a ledger, or perhaps a putlog, which breaks, taking a whole section or more, precipitating the men and the mass of material to the ground below. One can readily make an estimate of the result in death and injuries, depending on the distance of the fall.

The object of this article is to call attention of builders and others in the allied industries to the seriousness of the accidents due to faulty scaffolds and to offer suggestions to prevent them.

While it is true that in modern construction, each building presents an individual problem of scaffolding, there are many suggestions that can be considered to advantage in the erection of all scaffolds. The most widely used scaffold for masons is built with "horses" in their various forms. The stiff-legged "horse" is most desirable. As there is no necessity for nailing braces, it is easily constructed and can be removed without the usual waste of broken braces. However, as such scaffolds are somewhat bulky, they are expensive to move from one operation to an-

other, so that some contractors use a "horse" with hinges, fastening the legs to the putlog or cross-piece so that the horse can be folded, thus occupying less space when loaded on a car or truck. When this style of horse is used, it should always be toe-nailed to the floor, as a laborer accidentally striking a leg with a barrow may wreck a section of the scaffold.

Another form used is the square, made from two pieces of 2"x4"x5' for the uprights with two pieces 1"x6"x4'6" in length for the top and bottom. This makes a good scaffold when properly braced. The practice of driving nails only part way and bending them over when fastening braces on this kind of scaffold has been the cause of many minor accidents, because, frequently, in trying to climb on the scaffolds, workmen may pull the braces loose, causing backward falls which often result in injuries to the spine or head. Again, the sudden removal of a brace in this manner sometimes causes the collapse of a section of scaffolding with more serious results.

As this form of scaffold is only profitable and convenient on the inside of buildings, or for a short distance on the outside, the pole scaffold is used for greater heights. The pole scaffold is responsible for more serious accidents than all the other forms of scaffolds combined. It is used on the outside of buildings to a height of five or six stories, when there is no steel frame in the structure, and it is often subjected to great weight. For this reason great care should be used in its planning and construction. On four-story buildings the poles should be of selected stock 3x4 inches straight, free from bad knots and other imperfections, sawed square at both ends, so that there may be a proper footing and that succeeding pieces may have a good bearing when spliced. The poles should have a good footing on the ground and be secured at the bottom.

As conditions vary greatly with each operation, and often on the same operation, detailed advice can hardly be given as to the method of fixing a pole at the bottom, but the practice of resting and securing them to a sill is a method that can be used in many instances to good advantage, where the surface is soft or uneven; or, on sidewalks, on roofs of adjacent buildings, and in almost every condition encountered.

When one considers that wagons are likely to be backed against an upright, or that they can be struck by the end of a beam, or that some teamster may unload lumber against the scaffold, it will be realized that it is necessary to make the bottoms doubly secure.

The ledger, or horizontal stringer, is another important factor in this scaffold, and the size should be governed by the weight it must bear.

When a ledger is nailed to a pole, a pole should never be left until the required number of nails (usually eight 10-penny nails) have been driven into the pole. Numerous accidents have been caused by a workman driving one nail into a ledger, leaving it to secure the other end and then forgetting to return and properly secure the first end. It is preferable

to nail the ledger on the inside of the pole, for several reasons. It is more convenient to nail when standing on the platform, the nails being always in plain view; there is no obstruction on the outside of the pole to interfere with the braces being nailed directly to the poles; also, the shorter span for the putlog makes for safety.

The distance between the ledgers is governed by the work to be performed on the scaffold. For bricklaying and masonry, the ledgers are usually spaced five feet from top to top. Nailing a cleat under the ledger is a simple plan that is strongly recommended for safety.

In placing the putlogs, they should have at least four inches hold on the wall and should project sufficiently over the ledger to give good bearing, cut not less than six inches. The stock should be at least three inches by four inches and free from knots and placed narrow side up. Very recently in an Eastern city, two men were seriously injured by a frozen knot in a putlog breaking. It is impossible to use too much care in selecting good putlogs and in spacing them properly.

In placing the plank for the platform, which is usually four feet wide, care should be used that the plank rests on all the putlogs, so that an even distribution of weight will be obtained. Frequently, it is necessary to nail a narrow strip to the top of a putlog to bring it to the proper height on account of the overlap of the plank. A foot board should be nailed to the outside of the platform to prevent material falling on passersby or workmen below and a guard rail should be at a height of about three feet six inches from the platform for the safety of the workman on the scaffold.

The bracing of this form of scaffold should receive every attention, and as frequently as possible, braces should be nailed to the floors of the building, through the windows, to prevent the scaffolding from pulling away from the building.

The poles should be inspected frequently at the bottom to ascertain whether they have been displaced from their foundation or whether they are sinking into the ground.

The suspended scaffold is a comparatively recent invention, and is used only on buildings having a concrete or steel skeleton, with a height over five stories. As the name implies, the platform is suspended from above, usually on steel cables fastened to a thrust-out or outrigger, on the roof or some floor above the point where construction or bricklaying is being done.

Not many accidents have been reported due to the breaking of this form of scaffold. On the other hand, accidents may occur on these scaffolds due to the lack of safety precautions. As these scaffolds are nearly always used for bricklaying or terra cotta setting, it is necessary to have a foot-board and guard-rail with a wire netting fastened between the toe boards to prevent tools and fragments of material from falling to the ground. In some instances these safety measures were not employed, tools of various descriptions, bricks

and other material fell causing injuries and resulting in damage suits.

To protect the men on a scaffold from objects falling from above, a roof should be constructed directly over them. This can be done where the overhead drum is used, by clamping a 2x4-inch putlog on the cable and laying inch boards. Where the drum is on the platform, the machines are provided with up-rights to support the roof or covering. On some buildings planks were placed on the outriggers, in some instances six stories above the workmen, and afforded no protection whatever.

Care should be taken in lashing the scaffold to the building, so that it will not move when a workman pushes against the wall. This sometimes happens when putting sills, lintels and terra cotta in place, causing the workman to lose his balance and fall between the scaffold and the building.

As it is customary to stock this scaffold with material after the masons or bricklayers leave in the evening, care should be used not to overload. An instance of a scaffold being overloaded is known where the cable outriggers and platform stood the strain, but when the bricklayers came on the scaffold in the morning, the roof beams upon which the outriggers rested gave way and only by an act of Providence was a disastrous accident avoided.

The high cost of lumber, the scarcity of workmen and the increase in wage have all had a tendency to make for insecure scaffolds.

No matter what kind of scaffold is being built, a plank should never project more than a foot beyond a support unless a guard-rail is placed to prevent the workmen from walking on the unsupported platform and receiving a fall.

When the employer realizes the loss, not only to the workman, but to himself in material, and in time while constructing a broken scaffold; when he realizes the fact that he is responsible in a measure for someone being a cripple, and when he also realizes that a workman can only deliver the maximum amount of service when he is positive that the scaffold upon which he stands is secure, then will there always be secure scaffolds. If "speed at any price" is to be the motto, there will be scaffold accidents.

A QUESTION OF CHIMNEYS.

Some builders and architects know, but there are many who do not know that the new Building Code of New York City provides that owners who build higher than the adjoining buildings are obliged to carry up the chimneys of that structure to the height of the new building. This ordinance places no small constraint upon the man who erects a twenty-story building alongside of a five-story neighbor.

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Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Factory (alt. and add.), 5119 Stiles street, Philadelphia. Architect, E. Gibson, 220 West Forty-second street, New York City. Owners, Dentists' Supply Co., 220 West Forty-second street, New York City. Consists of remodeling of present building, 3 and 2 stories, 98x37 feet, and additions. Brick, 3 stories, 49x21 feet and 1 story 11x13 feet, slag roof, stone and concrete foundations, yellow pine and reinforced concrete floors, steam heating (lighting, reserved), hollow tile, m.u. work, hollow metal skylights. Architect taking bids, due February 15th. P. Halbach Const. Co., Twenty-sixth and Thompson streets, Philadelphia, is figuring.

Auto Sales Building, 1506-08 Callowhill street. Architect, not yet selected. Owner, Morris Crown, 435 Market street, Philadelphia. Additional story to present building. Work contemplated.

Residence (alts.), East Johnson street, Germantown, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Consists of interior alterations, steam heating, electric wiring and fixtures, plumbing and plastering and painting. Architect taking sub-bids, due as soon as possible.

Residence, Tioga street, Tioga, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Consists of interior alterations, electric lighting, steam heating, painting and plumbing. Architect taking sub-bids, due as soon as possible.

Residence (alts.), West Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Consists of interior alterations, steam heating, electric wiring and fixtures, plastering, painting. Architect taking sub-bids, due as soon as possible.

Bank, Frankford, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Consists of alterations to present heating system, m.u. work partitions, composition flooring, electric lighting. Architect taking sub-bids, due as soon as possible.

Temporary Office Building, No. 2620, Plan 58, 2620 Grays Ferry Road. Architect, private plans. Owners, U. S. Government, Schuylkill Arsenal, Q. M. Dept.,

Philadelphia. Brick, 3 stories, 78x70 feet, slag roof, waterproofing, ornamental iron work, steam heating, pine floors (heating, plumbing and lighting, reserved). Owners taking bids, due Feb. 18th, at 11 A. M. Chas Gilpin, Harrison Building, Barclay White & Co., 1713 Sansom street; Standard Const. Co., 1713 Sansom street; F. A. Havens & Co., 845 N. Nineteenth st.; and Mitchell Bros., 2125 Race street. E. E. Hollenback, Inc., 1804 Brandywine street, F. W. Van Loon, Denckla Building, Philadelphia, additional bidders.

Chemical Factory, Thirty-seventh and Tasker streets, Philadelphia. Engineer, J. Lewis Luckenbach, Harrison Building, Philadelphia. Owners, Nitrogenous Chemical Co., West End Trust Building, Philadelphia. Brick, steel and reinforced concrete, 1 story. Preliminary plans in progress.

Boat Shop (add.) and Building No. 10 (Extension), Spec. No. 2806, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Brick, steel, concrete and terra cotta, 2 stories, 120x59 feet and 1 story, 101x340 feet, slate and composition roof, steam heating, electric lighting, marble work, rolled steel sash, fire doors, fire escapes, cement floors. Owners taking bids, due February 25th, at 11 A. M. Wm. R. Dougherty, 1610 Sansom street; Wm. Linker & Co., 831 Cherry street, and McCloskey & Bahr, 1620 Thompson street, are figuring.

Residence (alts. and add.), 1728 South Broad street, Philadelphia. Architects, Milligan & Pierson, 520 Walnut street, Philadelphia. Owners, Augustine Social & Beneficial Society, care Architects.

Brick, rear addition, 2 stories, 20x21 feet, side addition, 2 stories, 32x3 feet, slag roof, electric lighting, hardwood floors, slate work, dumbwaiters, bar fixtures, hollow metal skylights (plumbing and hot water heating, reserved). Owners will take revised bids in a few days.

Elevated Stations (4), Allegheny avenue and Somerset street, on Frankford Elevated, Philadelphia. Architects, Dept. of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Dept.

of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, tile, marble and terrazzo work, rolled steel sash and skylights, hollow metal sash and doors, fire doors, iron stairs, cement floors, hollow tile, safety treads, roof ventilators, metal ceilings, wire work, ornamental iron work (electric work and plumbing, separate bids). Plans about completed. Owners will take bids in about ten days.

Auto Show Room, 1712-14 Race street, Philadelphia. Architect, Frederick Webber, 1421 Chestnut street, Philadelphia. Owner, J. Walter Rosenberg, Broad and Walnut streets, Philadelphia. Reinforced concrete, brick, terra cotta and stone, 2 stories and mezzanine floor, 40x130 feet, slag roof, stone foundations, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal sash and skylights, fire doors, flush bulks, iron stairs, ornamental iron work, cement, oak and mosaic floors, metal lath, wire work. Contract awarded to Alfred Zelfelder, 151 South Broad street.

Storehouse for Laboratory Samples and Surveillance Magazine and Tunnel, Frankford, Philadelphia. Architect, private plans. Owners, U. S. Government, care Edwin J. Benter, Frankford Arsenal. Stucco and hollow tile, 1 story, and basement, 30x11 feet, tunnel 60 feet long, Barrett roof, cement floors, hollow tile, roof ventilators, waterproofing, rolled steel sash, electric lighting, steam heating, kalamain doors. Lowest bids submitted: Hyde & Baxter, Washington, D. C., Item No. 1, \$3,300; Item No. 4, \$3,550. Monaghan & Lossie, Inc., 3016 Chestnut street, Philadelphia, Item No. 1, \$4,212; No. 4, \$3,861; A, \$3,594; B, \$4,852; A and B, \$9,149. W. W. Anstine & Co., 1218 Filbert street, Philadelphia, Items No. 1, \$4,573; No. 4, \$4,273; A, \$4,909; B, \$5,368; A and B, \$9,660.

Residence (alt. and add.), Overbrook, Philadelphia. Architects, Druckenmiller & Williams, 1537 Chestnut street, Philadelphia. Owner, Charles P. Vaughn, 5911 Overbrook avenue, Philadelphia. Stone, consists of general interior alterations. Alfred James, Bala, Pa., is taking sub-bids.

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RESPONSIBILITY**

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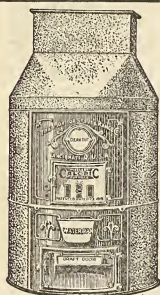
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man
and Interior and Exterior Fitter.

Store House, 213 South Front street,
Philadelphia. \$3,250. Architect, private
terms. Owners, Pennsylvania Trust Co.,
517 Chestnut street, Philadelphia. Cons-
ists of restoring fire damage, mill work,
plumbing, slag roof. Contract awarded to
John Duncan, 920 Walnut street, Philadel-
phia.

Boiler House, Sixty-third and Market
street, Philadelphia. Architect, J. M. Whit-
ham, 607 Bullitt Building, Philadelphia.
Owners, Shane Bros. & Wilson Co., on
premises. Brick and concrete, 1 story,
33x10 feet, slag roof, concrete floors, elec-
tric lighting, rolled steel sash, fire doors.
Contract awarded to F. B. Davis, 240

North Sixteenth street, Philadelphia.

Furnace House, Aramingo avenue and
Huntingdon street. \$20,000. Architect,
private plans. Owners, John T. Lewis Bros.
& Co., Lafayette Building, Philadelphia.
Brick, 1 story, 221x69 feet, composition
roof, electric lighting, cement floor. Con-
tract awarded to Turner Concrete Steel Co.,
1713 Sansom street, Philadelphia.

Superintendent's House (alt.), Andalu-
sia, Pa. \$1,600. Architect, private plans.
Owners, H. F. Michell & Co., 518 Market
street, Philadelphia. Consists of general
repairs to floors, slate roof, electric light-
ing, plumbing. Contract awarded to Thos.
J. Carberry, Heed Building, Philadelphia.

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1355 Colwyn Street
Philadelphia, Pa.

Warehouse, Tenth and Hamilton streets,
Philadelphia. Architect, Horace W. Cas-
tor, Stephen Girard Building, Philadelphia.
Owners, Sterling Iron & Steel Co., on pre-
mises. Brick, 2 stories, 60x14 feet, slag
roof, electric lighting. Architect is sub-
letting.

PENNSYLVANIA Construction News

State Hospital (add.), Nanticoke, Pa.
Architects, McCormick & French, Dime
Bank Bldg., Nanticoke, Pa. Owner, State
Hospital of Nanticoke, Nanticoke, Pa.
Brick, 2 stories, 60x90 feet, and 30x60 feet,
asphalt roof, tile floors (steam heating,
electric lighting and plumbing, reserved),
hollow metal nash and skylight, metal lath.
Owners are taking bids. Curtis & Co.,
Wilkes-Barre, Pa., are figuring.

Elks' Home, Scranton, Pa. Architect,
J. J. Howley, Traders' Bank Building,
Scranton, Pa. Owner, P. B. O. E. of Scranton,
Scranton, Pa. Brick, consists of gen-
eral interior alterations, electric lighting,
tile and marble work, electric fixtures,
plumbing. Architect has received bids.

Church and School, Buttonwood, Pa.
Architects, Morris & MacHale, Burr Building,
Scranton, Pa. Owner, St. Francis R. C.
Church, Buttonwood, Pa. Frame, 1 story,
60x100 feet, slag and slate roof, pine floors,
steam heating, electric lighting. Architect
taking bids, due as soon as possible. E. F.
Melon, Wilkes-Barre, Pa.; Stender Bros.,
Scranton, Pa.; Hagen Bros., South Scranton,
Pa.; Howard & Stender, Scranton, Pa.,
and Nanticoke Const. Co., Nanticoke, Pa.,
are figuring.

Orphanage, Nanticoke, Pa. Architects,

Morris & MacHale, Burr Building, Scranton,
Pa. Owner, St. Stanislaus Orphanage,
care of architects. Hollow tile and stucco,
2 stories and basement, 130x120 feet, tile
roof, hardwood and composition floors, hol-
low tile, metal lath, fire towers, safety
treads (steam heating, electric lighting and
plumbing, reserved), tile work, hollow metal
skylights, iron stairs. Plans about com-
pleted. Owners will take bids in about one
week.

County Court House (alt.), Honesdale,
Pa. Architects, Duckworth Bros., Coal Ex-
change Building, Scranton, Pa. Owner,
Wayne Co. Dept. of Public Buildings,
Honesdale, Pa. Brick, 2 stories, 140x120
feet, general interior alterations, lighting
and fixtures. Plans about completed. Own-
ers ready for bids.

Residence, Lebanon, Pa. Architect, A.
A. Ritcher, Reading, Pa. Owner, Chas. H.
Smith, Lebanon, Pa. Frame and stucco,
2½ stories, 26x34 feet, composition shingle
roof, pine floors, vapor heating, combination
lighting. Plans in progress.

Building No. 39, Reading, Pa. Archi-
tects, Muhlenberg Bros., Reading, Pa.
Owners, Carpenter Steel Works, Reading,
Pa. Concrete, steel and corrugated iron,
1 story, 30 feet high, 75x125 feet, concrete

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roof, rolled steel sash, metal lath. Architect ready for sub-bids.

Residence and Stable (alt. and add.), Elkins Park, Pa. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, name withheld. Hollow tie and stone, 2½ stories, 50x30 feet, wing 28x26 feet; stable, 2 stories, stone foundation, slate roof, hardwood and cement floors, hot water heating, electric lighting, tie and marble work. Plans about completed. Architect will take bids in one week.

Dwellings 10), Downingtown, Pa. Architect, M. Nirdlinger, Pittsburgh, Pa. Owners, The Harbison-Walker Refractories Co., Downingtown, Pa. Frame, 2½ stories, 27x-- feet, slate and tin roof, concrete foundations, electric lighting. Owners taking bids, due February 16th. Pomeroy Const. Co., 1609 Ranstead street, Philadelphia, is figuring.

Storage House, Wilkes-Barre, Pa. Architect, Geo. F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, Jos. Glennon, Wilkes-Barre, Pa. Concrete, 1 story, 30x60 feet, composition roof, concrete floors, electric lighting. Plans in progress. Architect will take bids in a week.

Machine Shop, Beaverbrook, Pa. Architect, Geo. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owner, Beaverbrook Colliery, Beaverbrook, Pa. Concrete and corrugated iron, 1 story, 40x100 feet, J-M Riegel roof, electric lighting, concrete floors. Plans in progress.

Apartment House (alts.), Kingston, Pa. Architect, Geo. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owner, Geo. Bray, Kingston, Pa. Brick (general interior alterations), 2 stories, 20x80 feet, plumbing, mill work, plastering. Plans in progress.

Hospital, Retreat, Pa. Architects, McCormack & French, Dime Bank Building, Wilkes-Barre, Pa. Owner, Central Poor District, care Jas. L. Keilly, Wilkes-Barre, Pa. Brick, 2 stories, 50x150 feet, asphalt roof, concrete floors, hot air heating, electric lighting. Plans in progress.

Warehouse, Franklin and Spruce streets, Scranton, Pa. Architect, G. M. Edson,

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Connell Building, Scranton, Pa. Owner, David Sprucks, Scranton, Pa. Brick, 1 story and basement, 100x150 feet, slag roof, steam heat, electric lighting, hollow metal sash and skylights, pine floors, elevators. Plans in progress.

Store (alt.), Forest City, Pa. Architect, J. H. Davey, Coal Exchange Building, Scranton, Pa. Owner, S. Lyons, Forest City, Pa. Brick, 1 story, 50 feet front, metal bulks. Owner taking bids.

Residence, Dunmore, Pa. Architect, J. J. Hawley, Traders' Bank Building, Scranton, Pa. Owner, M. J. Dempsey, Dunmore, Pa. Frame or stucco, 2½ stories, 32x38 feet, slate roof, steam heat, electric lighting, pine floors. Plans in progress.

Church, Forest City, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owner, St. Agnes's R. C. Church, care Rev. M. F. Manley, Forest City, Pa. Frame, 1 story and basement, 40x120 feet, slate roof, steam heating, electric lighting, pine floors. Plans in progress.

Cottages (2), Laurelton, Union Co., Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Penna. Village for Feeble Minded Women, care State Penna., Miss Nora P. Brown, President, Lancaster, Pa. Stone and brick, 2½ stories and basement, 77x53 feet and 100x84 feet, slag and slate roof, composition and pine floors, stone foundations, hot water heating, electric lighting, ornamental iron work. Lowest bids submitted by W. D. Steinbach's Son, Lewistown, Pa., Item No. 1, \$31,692; Item No. 2, \$36,030; total, \$68,322; Albert Boyer, Northumberland, Pa., total, \$70,000; Shamokin Lumber Co., Shamokin, Pa., total, \$70,000; Edw. Fav & Son, 2 South Mole street, Philadelphia, Item No. 1, \$43,968; Item No. 2, \$51,440; joint price, \$87,947.

Tower Keeper's Quarters, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care W. A. Young, Superin-

tendent of Lighthouse Inspection of Philadelphia District, Room 427, Post Office Building, Philadelphia. Stone and brick, Plans about completed. Owners will be ready for b'ds in one week.

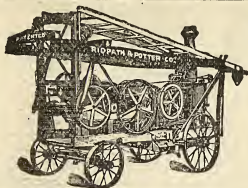
Store Building (alt.), Wilkes-Barre, Pa. Architect, Geo. F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. K. Weitzenkorn, Wilkes-Barre, Pa. Brick (general interior alterations), mill work and stairs, marble work, flush bulks. Plans in progress.

Residence, Hazleton, Pa. Architect, Geo. F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, T. J. Dalton, Hazleton, Pa. Frame, 2½ stories, 28x56 feet, oak and tie floors, hot water heating, electric lighting, tile work. Architect taking bids, due as soon as possible. H. Campbell and John Enro, both of Hazleton, Pa., are figuring.

Store Building, East Market street, Wilkes-Barre, Pa. Architect, Geo. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. K. Weitzenkorn, Wilkes-Barre, Pa. Brick, 3 stories, 31x65 feet, slag roof, pine floors, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal skylights, metal lath, roof ventilators, metal ceilings, iron stairs, damp-proofing. Architect taking bids, due as soon as possible. A. M. Hildebrand, Wilson Smith, Walborn & Barney, Ed. Ireland and J. Leach, all of Wilkes-Barre, Pa., are figuring.

Post Office (remodeling), Pittsburgh, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Consists of general interior and exterior alterations and additions. Lowest bids submitted by David Gordon Building & Construction Co., Cincinnati, Ohio, \$33,999; Rose & Rusher, Pittsburgh, Pa., \$43,266; Robinson & James, Wilkesburg, Pa., \$45,064.

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Stores and Apartments (3) (alt. and add.), Marcus Hook, Pa. \$15,000. Architect, E. Canby May, DuPont Building, Wilmington, Del. Owner, Mrs. Rose Gross, Marcus Hook, Pa. Brick, 2 stories, 64x40 feet, slag roof, steam heating, electric lighting, pine floors. Owner taking bids, due as soon as possible. Wm. T. Gilbreth, Ogden, Pa., and Harry Jones, Lindwood Heights, Pa., are figuring.

Store Building (alts.), Norristown, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Kennedy's Inc., 52 East Main street, Norristown, Pa. Consists of interior and exterior alterations, metal bulks, hardwood flooring, etc. Plans in progress. Architect will take bids in about a week.

Residence (alts.), Quakertown, Pa. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, name withheld. Stone, 2½ stories, 18x42 feet, interior alterations, hot air heating, electric lighting, tile work, new floors and electric water supply system. Plans completed. Architect will take bids in about two weeks.

Building (alts.), Eighth and Edgemont streets, Chester, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, Howarth Bros., Chester, Pa. Consists of interior alterations to first floor, hardwood floors, electric lighting, tile and marble work, cabinet work, reinforcing steel beams. Architects taking sub-bids, due as soon as possible.

PENNSYLVANIA

Contracts Awarded

Residence (alts.), South River street, Wilkes-Barre, Pa. Architect, Geo. Schroeder, Weitzenkorn, Building, Wilkes-Barre, Pa. Owner, Frank McCormick, Wilkes-Barre, Pa. Brick, 3 stories, 36x42 feet, steam heating, electric lighting, tile work, hardwood floors. Contract awarded to Wilson J. Smith, Wilkes-Barre, Pa.

Schools (2), Rosedale and Hyde Park, Pa. Architect, Wayne M. High, 11 North Fifth street, Reading, Pa. Owner, Muhlenberg Township School Board, Muhlenberg Township, Berks Co., Pa. Brick, 2 stories, 67x65 feet, slag roof, yellow pine floors electric lighting, heating, plumbing, reserved). Contract awarded to Geo. A. Koch, Reading, Pa.

Furn House (alts. and add.), Kennett Square, Pa. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owner, Earl S. Phillips, Kennet Square, Pa. Brick, 1 story, addition, 15x20 feet, canvas roof,

new porch, partitions, yellow pine floors and general repairs. Contract awarded to Owen Hoopes, Toughkenamon, Pa.

Store (alt.), South Main street, Wilkes-Barre, Pa. \$6,000. Architect, Geo. Schroeder, Wilkes-Barre, Pa. Owners, Blum Bros., South Main street, Wilkes-Barre, Pa. Consists of general interior and exterior alterations, 1 story, tile work, metal bulks. Contract awarded to A. B. Hildebrand, Wilkes-Barre, Pa.

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

Delaware Construction News

Office Building (alt. and add.) toilet rooms), Dover, Del. Architect, private plans. Owners, Diamond State Telephone Co., Dover, Del. Consists of interior alterations, heating extension, electric lighting, mill work, brick, plastering, plumbing. Owners taking bids, due at Bell Telephone Co., Seventeenth and Arch streets, Philadelphia, February 15th, at 3 P. M. E. R. Hall, 34 South Seventeenth street; F. L. Hoover & Son, 1023 Cherry street; Albert Zellfelder, 151 South Broad street; and J. Sims Wilson Co., 1125 Brown street, are figuring.

Residence and Garage (alt. and add.), Wilmington, Del. Architect, E. C. May, DuPont Building, Wilmington, Del. Owner, name withheld. Brick and stone, 2 stories, garage 20x34 feet, consists of general interior alterations, tin roof, concrete floors, electric lighting. Plans about completed. Architect ready for bids.

Store Building (alt. and add.), Ninth and Market streets, Wilmington, Del. Architect, J. J. Kenneby, Ford Building, Wilmington, Del. Owner, name withheld. Brick, 3 stories, 30x100 feet, composition roof, tile and hardwood floors, steam heating, combination lighting, tile and marble work, flush bulks. Plans in progress. Too early for details.

Apartments (alt.), 20½ West Sixth street, Wilmington, Del. Architects, E. L. Rice & Co., Wilmington, Del. Owner, Mrs. Chas. B. Dougherty, Wilmington, Del. Brick, 3 stories, general interior alterations. Contract awarded to J. E. Healy & Son, 707 Tannal street, Wilmington, Del.

Miscellaneous Construction News

Country House (alts. and add.), and Pneumatic Water System, New Paltz, N. Y. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, name withheld. Consists of two wing extensions, frame, 2½ stories, 17x34 feet and 10x24 feet, shingle on frame roof, hardwood and tile floors, plumbing and pneumatic water system. Owners, care M. K. Coutant, Arbuckle Farms, New Paltz, N. Y., taking sub-bids.

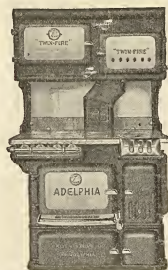
Parish House, Rochester, N. Y. Architect, A. A. Ritcner, Reading, Pa. Owner, Lutheran Church of the Redeemer, care of Rev. H. Branson Richards, 128 Fulton avenue, Rochester, N. Y. Brick and stone trim, 2 stories and basement, 49x100 feet, composition roof, hardwood floors, vapor heating, electric lighting. Owner taking bids, due February 27th. F. H. Rapp, West Rochester, N. Y.; A. Friederich & Sons Co., Otto A. Chadde and John Luther & Sons Co., all of Rochester, N. Y., are figuring.

Office Building, Spec. No. 2815, U. S. Armor Plant, Charleston, W. Va. Architect, private plans. Owner, U. S. Government, care C. W. Parker, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Brick, stone and concrete, 2 stories and

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basement, 136x55 feet, tile and slag roof, linoleum, tile and cement floors, electric lighting, tile work, hollow tile, rolled steel sash and skylight, ornamental iron work, metal lath, roof ventilators, waterproofing, damp-proofing, wire work. Lowest bid submitted by Wills Englehof Co., 101 Park avenue, New York City, \$71,384.

Boiler Shop, No. 2763, Washington, D. C. Architect, private plans. Owners, U. S. Government, care A. L. Parsons (Acting Chief), Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, frame and brick, 1 story, 100x200 feet, asbestos roof, steam heating, electric lighting, rolled steel sash, fire doors, maple and cement floors, hollow tile, metal lath, damp-proofing, ornamental iron work. Contract awarded to Warren-Moore Co., Colonial Trust Building, Philadelphia, Pa., \$81,116.



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NEW JERSEY

Construction News

Pier, Trenton, N. J. Engineer, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owner, City of Trenton, care Eng. Dept., City Hall, Trenton, N. J. Concrete, steel and corrugated iron, 1 story, L-shaped, 189x90 feet and 85x50 feet, reinforced concrete roof. Owner will advertise for new bids.

Apartments (alts. and add.), Walnut street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owners, Petry Express Co., Trenton, N. J. Brick, 3 stories, 30x60 feet, hot water heating, electric lighting, plumbing. Plans completed. Architect is ready for bids.

School of Industrial Arts, Quarry street, Trenton, N. J. Architect, J. O. Hunt, 114 North Montgomery street, Trenton, N. J. Owners, Trustees of School of Industrial Art, on premises. Brick, 2 stories and basement, 80x70 feet and 25x60 feet, slag roof, steam heating, electric lighting, rolled steel sash, concrete and wood floors, metal lath. Plans in progress.

Apartment House, Providence and Pacific avenues, Atlantic City, N. J. \$20,000. Architect, Seward G. Dobbins, South Vir-

ginia avenue, Atlantic City. Owner, M. I. Vetter, Alexandria Apartments, Atlantic City, N. J. Hollow tile and stucco, 3 stories, 36x80 feet, slate roof, hot water heating, electric lighting, tile and marble work, hardwood floors, hollow tile, metal lath, ornamental iron work. Plans in progress.

Apartment House (alt.), Bridgeton, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owner, C. Lamer, Bridgeton, N. J. Frame (general interior alterations, 2 stories, plumbing, mill work, plastering. Plans in progress.

Church, Asbury Park, N. J. Architects, L. E. Smith and H. E. Warren, 2 West Forty-seventh street, New York City. Owners, First Methodist Episcopal Church, Asbury Park, N. J. Steel, reinforced concrete, stone, brick, limestone, terra cotta, 1 and 2 stories, 70x192 feet, concrete, tile and maple floors, Roman tile and slag roof, metal lath, skylights, roof ventilators, iron stairs, iron ladders, ornamental iron work, waterproofing, damp-proofing, wire work. Architects taking bids, due February 13th. Pomeroy Const. Co., 1609 Ranstead street, Philadelphia, is figuring.

NEW JERSEY

Contracts Awarded

Hotel (remodeling), Isleworth Hotel, to be known as Blackstone Hotel, South Virginia avenue and Boardwalk, Atlantic City, N. J. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, name withheld. Consists of general improvements, interior and exterior alterations. Plans completed. Architect will take sub-bids in a few days.

School (add.), near Reverton, N. J. Architect, Arnold H. Moses, 136 South Fourth street, Philadelphia. Owner, Cinnaminson School Board, care Benj. Lippincott, District Clerk, Riverton, Burling-

ton Co., N. J. Brick, 2 stories (4 rooms), addition 23x64 feet, slate roof, pine floors (plumbing, heating and lighting, reserved). Architect taking bids, due February 18th. L. F. Loudon, Riverton, N. J., and Geo. W. Shaner, Palmyra, N. J., are figuring.

If your sales-talk is keyed to interest men who build it should occupy space every week in the "Guide," the only building magazine this side of Manhattan Island.

Maryland

Construction News

Residences (3), Lake Drive near Brookfield avenue, Baltimore, Md. Architect, private plans. Owner, F. O. Springer, Equitable Building, Baltimore. Brick, stone trim, 3 stories, tin and composition roof, steam heating, combination lighting, tile work, hardwood floors. Plans about completed. Owner will take sub-bids.

Garage, Garrison Lane and Franklin street, Baltimore, Md. Architect, private plans. Owner, J. M. Curran, 501 North Pulaski street, Baltimore. Brick, 1 story, 50x200 feet, slag roof. Plans in progress.

Abattoir and Cold Storage, Tank House, Power House and Garage, Sixth street, South of Wilkins avenue, Baltimore, Md. Architects, Gardner & Lindenberg, Marquette Building, Chicago, Ill. Owners, Corkran, Hill & Co., 221-7 South Howard street, Baltimore. Reinforced concrete, brick and stone, 3 stories, 90x220 feet, composition roof, indirect and direct heating, electric lighting, steel sash, metal doors, rolled steel sash and skylights, roof ventilators, hollow tile, ornamental iron work, fire escapes, electric elevators. Owners taking bids, due February 18th. The following are figuring: Singer-Pentz Co., Equitable Building; Consolidated Eng. Co., Calvert Building; Piel Const. Co., 2519 Edmondson avenue; C. L. Stockhausen Co., Gay and Water streets; Cowan Building Co., 106 West Madison street; West Const. Co., American Building; B. F. Bennett Building Co., 123 South Howard street; J. Henry Miller, Inc., Butaw and Franklin streets; Cogswell-Koether Co., 406 Park avenue; H. D. Watts Co., Garrett Building, Baltimore, Md.

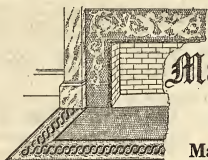
Maryland

Contracts Awarded

Warehouse, 1609 East Fairmount avenue, Baltimore, Md. Architects, Callis & Callis, 2055 Kennedy avenue, Baltimore, Md. Owner, A. Brownstein, on premises. Brick, 2 stories, 75x173 feet, slow burning construction, slag roof, steam heating, electric lighting. Contract awarded to J. Silberstein, Equitable Building, Baltimore, Md.

Garage and Experimental Plant, East

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PHILADELPHIA, PENNA.

Fayette street, Highlandtown, Md. Architect, Thos. Bond Owings, 347 North Charles street, Baltimore, Md. Owner, Continental Can Co., Highlandtown, Md. Reinforced concrete, brick and frame, 2 stories, 83x100 feet, slag roof, steam heating, cement floors, electric lighting, skylights, ventilators (plumbing, lighting, heating and elevator, reserved). Contract awarded to Hicks, Tase & Norris, Inc., 106 West Madison street, Baltimore.

Manufacturing Building, Charles and Barre streets, Baltimore, Md. Architect, private plans. Owners, P. Lorrillard & Co., Baltimore, Md. Lessee, Federal Tin Co., on premises. Consists of general interior alterations and addition. Contract awarded to West Const. Co., American Building, Baltimore, Md.

Factory, Central avenue and Bank street, Baltimore, Md. Architect, private plans. Owner, Baltimore Mfg. Co., L. H. Windholz, General Manager, on premises. Consists of general rebuilding, brick, concrete and mill work, electric lighting, etc. Con-

tract awarded to West Const. Co., American Building, Baltimore, Md.

Manufacturing Plant, Cumberland, Md. Engineers, Diescher & Sons, Pittsburgh, Pa. Owner, Kelly-Springfield Tire Co., Cumberland, Md. Brick, concrete and steel, 1,000x651 feet. Will consist of boiler room, power house, pump house, mechanical building, factory building, 45,000 cu. yds. of concrete. Diescher & Sons, Pittsburgh, Pa., will superintend construction.

Machine Shop, Sterrett Alley, Baltimore, Md. Architect, private plans. Owner John M. Lawrence, Baltimore, Md. Brick, 1 story, slag roof, electric lighting, cement floor. Contract awarded to H. B. May, Baltimore, Md.

Still House, Curtis Bay, Md. Architect, private plans. Owners, U. S. Industrial Chemical Co., Curtis Bay, Md. Steel, concrete and corrugated iron, 1 story, 60x80 feet, hollow metal, skylights, composition roof, electric lighting. Contract awarded to Austin & Co., Bulletin Building, Philadelphia.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, 1622 South Eighth street, \$2,800. N. D. Amico (O and C), 1620 South Eighth street. Brick and stone, 2 story, 18x29 feet, slag roof.

Factory, Venango and Memphis streets, \$4,000. J. M. Kennedy, Jr. (O), 1001 Chestnut street. H. B. Weldon (C), 1606 Cherry street. Brick, 1 story, 60x150 feet, stone foundation, slag roof.

Furnace House, Aramingo and Huntingdon streets, \$20,000. J. T. Lewis Bros. & Co. (O), as above, or Lafayette Building. Turner Concrete Steel Co. (C), 1713 San-

som street. Brick, 1 story, 221x69 feet, composition roof.

Renement House, S. E. Cor. Fifty-sixth and Chester avenue, \$24,000. Nelson Fry (O), Nineteenth and Arch streets. Walter R. Potts (C), 1026 Wood street. Stone and brick, 4 stories; front building, 33x27 feet; back building, 25x50 feet; slag roof, steam heating.

A hen is the only kind of a critter that can produce something by sitting down and doing nothing.—Exchange.

Alterations and Additions

Dwelling, 4612 Fairmount avenue, \$860. S. Stone (O), 107 South Alned street. Jas. A. Fitzgerald's Sons (C), 1623 Snyder avenue. Repair fire damage.

Store, Twelfth and Vine streets, \$475. Wm. H. Sternhal (O), as above. B. Bornstein (C), 1010 North Franklin street. Inside alterations.

Store and Warehouse, 132-34 Arch street, \$6,500. H. Fliegelman (O), 11-13 North Second street. Lam Building Co. (C), 1001 Wood street. Elevator shaft, brick, 3 story, 13x16 feet, and interior alterations.

Storehouse, 213 South Front street, \$3,200. Pennsylvania Trust Co. (O), 517 Chestnut street. John Duncan (C), 920 Walnut street. Repair fire damage.

Dwelling, 5625 Chester avenue, \$1,250. Agnes S. and Katherine Peterson (O), 5637 Chester avenue. Geo. H. Pierce (C), 5514 Chester avenue. Brick, 1 story, 16x12 feet, slag roof and alterations.

Store and Hall, 513 North Sixty-first street, \$1,000. Chas. D. Heavy (O and C), as above. Alteration into garage and dwelling.

Dwelling, 1914 Wallace street, \$300. R. A. Dougherty (O), 527 North Nineteenth street. Frank Buchanna (C), Fourth and Spruce street. Interior alterations and repairs.

Store, 1027 Market street, \$1,000. John M. Schwelmis (O), as above. Harry R. Rust (C), 19 South Eighteenth street. Alterations to bulk window.

Factory, Huntingdon and Aramingo avenues, \$3,000. John T. Lewis Co. (O), Lafayette Building. Jas. T. Allen & Son (C), 510 North Eighth street. Iron on iron, third story addition, 49x11 feet.

Factory, 418-20-22 Sansom street, \$7,500. Geo. H. Buchanan Co. (O), as above. Evans construction Co. (C), 9 South Eighteenth street. Fire damage.

Store and Dwelling, 511 South Fourth street, \$300. A. Behaveke (O), 310 South Fifth street. Alex. Lamb (C), 4824 North Broad street. New Walls.

Store, Germantown avenue and Somerset street, \$675. R. N. and Rose Adams (O), 2750 Germantown avenue. J. T. Carberry (C), 6227 Limekiln Pike. New bulk front.

Storage, 941 North Front street, \$700. Brodsky Bros. (O and C), 449 North Third street. Brick, 2 story, 22x30 feet, slag roof addition.

Hall and Stores, 3917 Lancaster avenue, \$600. S. L. Smedley (O), Stephen Girard Building. Philadelphia Steam Heating Co. (C), 1315 Cherry street. Low pressure steam heater.

STRUCTURAL ENGINEER AS AN

"ARTIST."

In a paper on the Hell Gate Arch Bridge, Mr. Ammann, an Eastern engineer, said:

"Engineering structures are still regarded by many engineers as mere works of utility, which deserve no consideration in architectural or artistic treatment. So long as this opinion prevails the engineering profession will not lift itself to a higher plane, and it is even

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running the risk of being relegated to second place—or after the architect—in the erection of such monumental structures as properly belong in its domain."

True; and does it not also follow that, even in structures that are not monumental, the structural engineer has often been relegated to second place because of his failure to appreciate that esthetic treatment cannot be profitably slighted? Not long ago a structural engineer told the editor that it took him some time to learn why he could not sell his services in competition with architects. Finally he discovered that the average client is so greatly impressed by the wash drawings made by architects that the plain black and white drawings made by an engineer receive scant consideration. Thereafter he began to color his drawings, and coincidentally to secure commissions for the design of buildings. Moral: If you would win out as a structural economist, first get the job as an artist.—"Engineering-Contracting."

That the engineer is not infrequently inclined to sacrifice the artistic for the practical, there can be no question. Only a few days ago this was forcibly brought to our attention by a San Francisco architect who had been called in for advice by the Mayor of a neighboring city. An engineer had submitted a plan of a concrete bridge which is to be built on a prominent street in the town. The site is in the heart of the residence district. Beautiful homes and gardens predominate the neighborhood. The engineer had submitted a drawing that called for a very substantial bridge, yet it lacked the artistic treatment which a structure in that part of the town seemed to require.

"There is something wrong about this design," said the Mayor, "but we don't know what it is." The architect knew at a glance. He pointed out the defects and made a few suggestions. "I guess you're right," said the Mayor, and he promised to consult further with the architect before accepting the engineer's plans.—"Architect and Engineer of California."

HOUSES MADE NEW.

Houses built before the age of sleeping porches, sun rooms and modern electrical and plumbing equipment can be bought and made into dwellings that are more artistic and serviceable than many of the modern structures. To obtain this result, the old house must be selected with care and the remodeling ordered only after a careful study of the house.

The remodeled house is often more comfortable, charming and satisfying than one built new. Buying a house ready built is like purchasing clothes ready made; it is never quite a perfect fit; there is never perfect harmony with individual needs and requirements. Remodeling makes the old house practically new and with the added advantage that the general plan is satisfactory, it is easier to see

just what modifications and improvements are needed than to see them from a study of the architect's plans.

An old house, endeared through years of occupancy and association, grows into a familiar adjustment to the needs of the family. But usually there comes a realization of the many ways in which it might be altered and improved. The growing family requires more room and changed arrangements or the taste of the owner becomes finer with the years or bettered fortune brings him face to face with the problem of remodeling. He does not care to move to a new dwelling which might prove, when tested by occupancy, less satisfying.

The two principal reasons for remodeling are the need of more space, convenience or comfort, and the natural desire to make the home more beautiful. Both requirements can be obtained by proper remodeling which may really prove an actual transformation. Remodeling gives a stamp of individuality to a dwelling as nothing else can, for it means the revising of the building, within and without, to harmonize with individual tastes and needs.

The fronts of many city houses have a characterless sameness differentiated in a long row of residences only by their numbers. In remodeling, the lines of the stoop may be changed so that a straight incline, broken by a turn, gives a new appearance. The door is to a house what the face is to the individual; by simple treatment it can smile, charm, grave and welcome. Windows, too, can be made

something more than mere openings for light and air, and the whole exterior so modified by right touches that what was merely a house in the block may seem somehow to become the one house in the block.

The front stoop, the back fence, the interior of the house, its architectural features, its furnishings and its decorations, should all be considered a unit. It is this unity that will give the fine harmony essential in remodeling. The interior can be so changed, by rebuilding, by alterations, redecorating or refurnishing, to accord with the owner's taste.

Remodeling the interior of a house may be architectural or decorative or may combine both features. A rear extension may give opportunity for the making of an extra bathroom and sleeping chambers or the addition of a library, smoking room, conservatory, billiard room, breakfast room or some other room long desired, but heretofore impossible. The additional space thus acquired may be diverted into increasing the size of other rooms that have proved too small for the growing needs of the family.

Decorating will bring a floor into the same key of color and make it harmonize with wall coverings and draperies, and furniture, correcting the discord that often comes into a home by the accumulating of furnishings bought at different times. True decorating unifies, simplifies and harmonizes all detail in perfect accord with one dominant note.—Noble Foster Hoggson.

BRIDGE BUILDERS AND STRUCTURAL SOCIETY MAKES ANNUAL REPORT

Records of the Bridge Builders and Structural Society, as collected by George E. Gifford, its secretary, show 114% of the entire capacity of the bridge and structural shops of the country was contracted for. Following are excerpts from the annual report of the secretary, presented at the annual meeting:

"We little thought twelve months ago that a large proportion of our capacity would today be devoted to the building of ships, but the fact that such is the case shows the versatility of the men controlling our industry and their devotion to the needs of our country. We have seen the normal business of the fabricated steel industry practically laid aside and new fields entered, not only that our best endeavors may be given to our country, but because the ordinary lines of business have been, to a great extent, shut off and it has been necessary to seek new lines in order to provide work for our shops.

"Added to the great requirements of the Government and the maximum of speed which it requires in the output of its material, unusual labor, transportation, fuel and weather conditions have been faced, so that

the successful management of a fabricated steel plant has been anything but a sinecure.

"Due to the influence of this Society, practically the whole fabricating industry has united in proffering aid to the Government. As long ago as last May our men saw that our assistance would be needed and formed a 'War Aid Committee' which, in spite of discouragements, was continued, with some changes of plan, until it was seen that it had outgrown this Society and should be representative of the entire independent industry. It then called a convention of fabricators, which met in Pittsburgh on November 27, and the aid of the industry was enthusiastically pledged. The organization called the 'Steel Fabricators of the United States,' which was then formed, now represents almost the entire independent capacity of the country, not only of structural shops, but also of plate and tank shops. Headquarters have been established in Washington and a secretary installed therein, giving constant attention to the requirements of the Government and the interests of the fabricators.

"The period of depression which has followed the entrance of the United States into

the war, causing the practical suspension of all the commercial business in fabricated steel, has resulted in the sales for the year 1917 falling considerably below those for the years 1915 and 1916. Our figures for the year, compiled from reliable sources, show that the total sales of fabricated steel for the year 1917 amounted to 1,285,000 tons as against about 1,500,000 tons for both 1915 and 1916. This amount is probably less than it should be because the collecting with accuracy of statistics on fabricated ships seems to be well nigh impossible.

"The work of the Society during 1917 went on with little or no change so far as the operation of the 'open price plan' with its attendant reporting features is concerned. The present rules seem to be well established and satisfactory to all our members. Attempted extensions do not meet with much favor.

"A year ago the ruling prices for plain material were 3.10c. for shapes and 3.60c. for plates Pittsburgh base. From that time they advanced through various steps to an asking mill price of 4.00c. for shapes and 4.50c. for plates, but with actual quotations for plates anywhere up to 10.00c. and 12.00c. per pound with most quotations based on an average of about 6.00c. In the autumn the Government stepped in and fixed the prices for plain material at 3.00c. and 3.25c.—base Pittsburgh and Chicago. These prices have been accepted without demur by the mills and are the ruling base prices to-day. The effect of fixing of prices has not stimulated materially general buying, but this is due to Government priority requirements which make it almost impossible for the general purchaser to secure deliveries, as well as the financial situation which makes it difficult or impossible to secure capital for commercial or speculative building."

MARBLE CONVENTION.

Association Holds Annual Meeting and Elects New Officers.

The sixteenth annual convention of the National Association of Marble Dealers was held in New York City.

Charles L. Hilgarner, the retiring president, reviewed the activities of the association for the past year and said, in part:

"Our association has made progress during the past year. We have had peace with our employees; with the exception of occasional demands in the shops for increase in pay, which occurrence could not be well avoided during these troublesome times. I presume that most of those approached saw the necessity of granting a reasonable advance. The steady increase of supplies of all kinds has affected to a great extent our employees, as well as ourselves, and we consequently must expect to advance wages, in order to overcome the advanced cost of living.

"Where we have to deal with the setters,

I am glad to say that we have had no trouble whatever; in fact, since our arrangement with the B. M. and P. I. U., we have had no trouble on the buildings, as they have generally lived up to the smallest detail of their agreement. It was probably a surprise to some of our members when they were notified in August of the advance which was granted to the setters of 25 cents a day.

"The Code of Practice continues to work out satisfactorily. While we have had a number of cases to contend with, the outcome proved the full efficiency and practicability of our Code. It has been favorably commented upon in many quarters. The National Builders' Exchange has indicated its intention of recommending and adopting a Code of Practice containing many of the features found in ours. The contractors and architects are becoming more accustomed to our rules of bidding and conditions noted on proposal, which are required to become part of contract, and, in my opinion, it is a matter which depends only upon the backbone of each member, which will result in the universal adoption of our Code of Practice and bidding conditions.

"I would like to call attention principally to the importance of having an opening date fixed in all cases. It is not enough to take for granted that the dates noted on the postal cards which are usually received from general contractors are correct, and it is my idea that the secretary should make it a point to have the absolute date fixed by the architect, that every member should insist upon the architect or contractor himself as to an opening date, after which he will consider no other bids.

"We have taken up the question whether some of our members, who are disposed to do so, could utilize their plants, or a part of the same, in the manufacture of some article which is required by the Government, for the reason that owing to the lack of orders some of the plants will have to close down for want of work. The Government has a commission appointed to handle this question, and I feel that we should take immediate steps to organize a committee from our members whose task it will be to tabulate all of the plants of our members, giving capacity, description of buildings, available power, etc., which list could be shown to the respective Government officials should any use be found for our idle plants."

BUILDING MATERIALS IN BRITAIN.

The Minister of Reconstruction in Great Britain has recently appointed a committee of distinguished public men to consider and report on the supply of building materials after the war, with especial reference to the following subjects:

1. To inquire into the extent of the possible demand for building material for all purposes which will arise in this country during

the transition period, and the extent of the available supply and form of such material.

2. To inquire how far the quantities of material now available are capable of increase; what are the difficulties in increasing them; and how those difficulties can be removed; and to report to what extent an increase in production will affect the price of the materials.

3. In the event of the supply of material or labor being insufficient to fulfill the total building demand, to consider the method by which the priority of various claims should be settled; and to report what steps are necessary to insure that the manufacture of the materials, so far, e. g., as they are at present inadequate, shall be extended in time to secure sufficient quantities for use when required on the cessation of hostilities; and to recommend what steps should be taken during the war to facilitate a prompt commencement of building work at that time.

4. Generally to consider and report upon any conditions affecting the building trades which tend to cause unduly high prices, and to make recommendations in regard to any measure of control which it may be desirable to exercise over the charges, production, transport or distribution of material.

The production of 1916 was stimulated by the extraordinary rise in price of the metal to an average of more than 25 cents for the entire 12 months compared with 14.47 cents in 1915 and 13.32 cents in 1914. In 1916 the quotational average was 28.46 cents, but the actual average price received was in the vicinity of 25½ cents.

In the great reconstruction days to follow peace copper should be utilized in constructive and electrical work on a scale never before approached in the world's history. At the same time it is to be remembered no new deposits—which require fully five years after discovery to bring to productivity—are known to exist. The United States has in all probability witnessed maximum production figures for years to come.

USE OF CREOSOTED WOOD BLOCKS.

The use of creosoted wood blocks, which originally began as paving material for city streets, has now spread into many other lines, according to a statement issued by the United States Forest Service. Its durability, noiselessness under heavy traffic, and its sanitary properties give this material especial value for use where heavy trucking takes place, and such flooring is found now throughout the country in factories, warehouses, machine shops, foundries, quarries and docks, and even in hotel kitchens, hospitals, laundries and slaughter houses. It is well liked by workmen because it is easy on the feet.

The new buildings of the big Dunwoody Industrial School in Minneapolis, which has been made one of the largest naval training schools in the country, has this type of floors.

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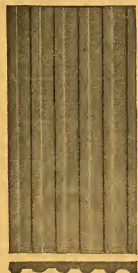
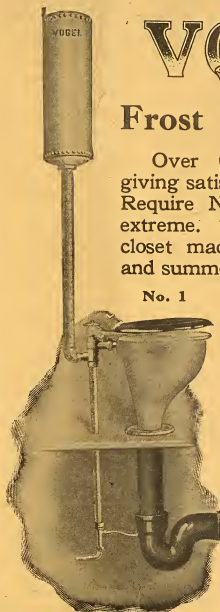
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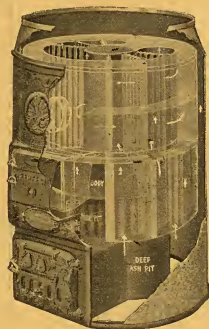
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February 20, 1918

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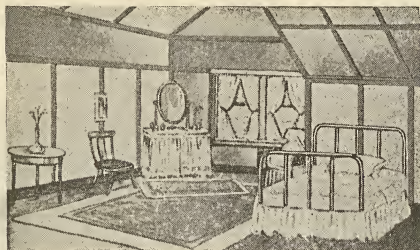
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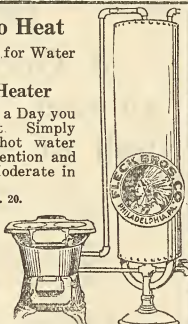
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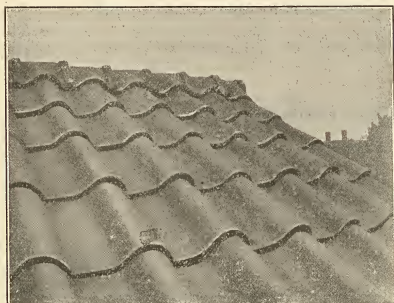


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VOLUME XXXIII
Number 8

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February 20, 1918

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As The Editor Sees It



A REVIEW of the figures, compiled by the Philadelphia Bureau of Building Inspection, showing the number of permits and operations, and the estimated cost year by year since 1907, reveals the fact that, even in normal years, these figures show a decided tendency to fluctuation. The annual record of building expenditure is as follows:

Estimated

Year	Permits	Operations	Cost
1907	8,726	15,999	\$36,659,655
1908	8,809	13,950	29,408,580
1909	8,991	17,294	42,881,370
1910	8,592	16,383	37,866,565
1911	8,870	16,215	40,030,985
1912	10,123	14,707	37,173,635
1913	10,564	14,813	38,763,850
1914	9,747	15,709	35,419,605
1915	9,529	17,722	39,444,125
1916	8,838	15,613	49,896,570
1917	6,490	8,977	34,016,480

* * *

IN but one year of the decade covered by the foregoing statistical returns has the estimated cost of the building work of the year dropped below the figures for 1917. That was in 1908, when the total expenditure scored the record low level of \$29,408,580, or approximately, four and a half millions of dollars below the figures for the year just closed with its abnormal conditions in the matter of material cost, labor scarcity, car shortages and the widespread depression incident to our embarkation in the world war.

A study of the figures for the past ten years will show that fluctuations of anywhere from three to ten millions of dollars have not been unusual.

These fluctuations are clearly traceable to the influence upon the figures, in the years affected, of one or two unusually big projects. Take 1917 as an example. One additional million dollar job would have placed the year well up to a parity with 1914. It should be recognized that two of the commanding factors in the unusually low level reached last year were, first, the entirely natural disposition of big investors to go ahead with projects involving a vast outlay in face of the general uncertainty of the national outlook and, second, the tremendous and notable falling-off in operative activity.

* * *

AT the same time it would be a serious mistake to overlook the circumstance that the figures here given for 1917 may, by no means, be taken to reflect the actual status of building conditions in the local field. It should be remembered that these figures are based upon the permits issued by the Bureau of Building Inspection which is without jurisdiction over millions of dollars' worth of additional building work carried on by Philadelphia capital and handled by Philadelphia builders and building supplies concerns. The returns given are necessarily confined to Philadelphia county. All the vast structural

activity of 1917 in the territory between here and Wilmington, in the munition zone, is omitted from this total. Probably a million or two of dollars' worth of building along the main line is also omitted. One of the reasons why we refuse to subscribe to the pessimistic view of the building outlook current in certain quarters is that we feel absolutely certain that had an accurate record been possible of the work done in and about Philadelphia during 1917 and this total were to be added to the figures of the local bureau it would be found that Philadelphia was well up among the leading cities of the country in structural enterprise.

* * *

WHILE it is not an easy matter to forecast what may happen in a situation such as that which now faces the country we are optimists enough to look for a decided boom, all along the line, with the return of settled weather conditions. This does not mean that we shall expect to see any considerable activity in skyscraper construction so long as conditions in the steel market remain as they are. But in many industrial types of building, in operative dwellings, in home architecture, we confidently expect to see a return, within the next few months, to something like normal figures. The labor problem promises to sensibly improve with the release of large number of mechanics tied up for some time past in cantonment work.

**DRAWING
MATERIALS**

CHARLES H. ROBBINS, JR.
125 S. 11th Street, Philadelphia
BELL PHONE, WALNUT 1086 KEYSTONE PHONE, MAIN 497

**BLUE
PRINTS**

Material—aside from steel,—while high in price, is plentiful as to quantity and within easy reach. In short, there exist no insuperable obstacles to building if the need for it is of a kind to justify the outlay. If 1918 fails to show a considerable advance in the direction of normal standards we shall feel that we have lost our one-time acute prophetic instinct. Philadelphia is still one of the finest building centers in the United States and it is written upon all the signs and portents that she is destined to so remain in war or in peace.

* * *

IN the country at large only two cities, Akron, Ohio, and Erie, Pa., showed an increase in the buildings for which permits were taken out in December, 1917, over December, 1916. Even in these two cities the number of permits were not as many as in the preceding year. Commenting on the general situation the *Federal Reserve Bulletin* remarks:

"Building activities have been greatly reduced, due to scarcity and high prices of labor and materials and lack of mortgage money. Where an increase is shown over 1916 in the value of buildings being erected, this is due almost wholly to the erection of manufacturing plants. Therefore, reports show that the building business is very dull, and some manufacturers of products such as plumbing materials, etc., are remodeling their shops to enable them to accept orders from other sources.

Concerning manufacturing the report comments that:

"Government demands and regulations which cut in many different directions, the weather, coal shortage, and transportation difficulties, all tend to obscure and mix the real situation. A shortage of coke has compelled the banking of a large number of furnaces, and consequently has heavily reduced the production of pig iron. Some manufacturers who ordinarily furnish their own supply of pig iron through their own organization, are compelled to buy from outsiders. This in its turn affected the steel business and its manufactured products. However, it is thought that, with a clean-up by the railroads, the steel business will be resumed on a scale that will more than take care of Government needs and will revive commercial demands.

"The frozen rivers, and lack of cars have seriously interfered with the coal trade. Apparently the mines are in a position to furnish more coal, and, with normal weather and a means of marketing their product, they should do a much increased business.

THE clay and brick industries, except in isolated cases, report decreased output due to delay in receiving materials and in having their products delivered.

"Owing to natural gas shortage, a number of glass factories are practically idle and some are said to be closed for the winter. In several cases, on account of fuel conditions, gas producers have been installed. The window glass manufacturers are adversely affected by the cessation of building operations."

* * *

A"BUILD NOW" argument that goes back a half century to recall Civil War conditions is presented in the current number of *Realty*. Says the writer:

"Now is the time to build because the price levels of labor and building material of before the war have gone forever. They will not return with the close of the war. The rates of to-day will continue after the struggle has been decided. This prediction is based on the effects which the Civil War had on building trade wages of those times and construction material prices.

"In those days steel was unknown to building construction. As brick and wood were the materials of buildings at that time, the exigencies of war were not expected to affect their production. Yet the calls for brick and timber for use by the army and other branches of the national government were so great that there was little left for private operations and manufacturers and traders had no time to attend to the requirement of the home builders of the country. The price of building material went up as a consequence, and it was a rich and venturesome man indeed who attempted construction in those days.

"At that time iron pressed into shapes was used in the facades of the largest commercial structures, but so high were the rates and so limited was the supply, due to war department demands, that many structures which had been started about the beginning of the war which were to be of the iron front type were halted and brick facades put up instead. In many cases facades which were about to be started were abandoned until after the war, when it was expected that the old building cost would again prevail. But the end of the war did not bring lower prices in building material or in labor. In fact, prices in many sections took a decided jump and remained high for some time. Though they were reduced they never came back to the standard of before the war.

"The building trades adjusted their demand to the conditions of the times,

which required more money to live than before the war. It was again a matter of supply and demand. Army drafts had stripped the building craft of thousands and thousands of workmen who never returned to their peaceful occupation. When building was resumed there were comparatively few mechanics to be had.

* * *

CONSTRUCTION work increased under the urging of commercial enterprises and business expansion. The trade of the country which was held up while the national government was putting down the rebellion fairly burst all bonds. Builders were called on for larger and many more structures for commercial purposes. The return of peace, the army and big business found the country's residential accommodations inadequate, and again builders were asked to do big things. But in either case builders, handicapped by the shortage of labor and in an effort to obtain working forces, vied with each other for the service of the competent mechanic. This established a price standard which later was reduced when the ranks of the building trades were larger, but the reduction was never permitted to fall to a level anything near that which was paid to building men before the great Civil War.

"The same with the new building material prices. Folks got used to paying them. In fact, they had to get used to them, because lower quotations were out of the question, due to the general increase in the labor wage scale throughout the country. Materials used in manufacturing bricks and iron and hardware and other items of construction had increased, so that builders had to pay much larger prices for material.

"Conditions of to-day with regard to building are the same as during the Civil War. Knowing the result of this crisis on construction cost, it is safe to predict that a similar result will follow the struggle in which the country is now engaged and that the result will be a new high price level for building material and labor."

* * *

THE same magazine presents a timely little hint to house owners under the caption, "Take a Look around." It runs:

"Take a look around your home and your place of business, and see just what the fire hazard is at your own place and also your neighbor's. A very large proportion of fires come from carelessness.

"Is there a lot of rubbish blown up in the corner? Has paper and other trash accumulated anywhere on your premises?"

Have you allowed boxes and excelsior to accumulate in or near your buildings? If so, you needn't be surprised some day to be compelled to turn in a fire alarm. And then you will wonder how it all happened.

"American people, as a rule, are built that way. We are so cocksure in our attitude that we seem to feel that nothing can happen to us. We expose our property and that of others to all manner of hazard, and say, 'There's no danger of my ever burning out.'"

"We seem to think that Providence

will take especial care of us. The fact is, that Providence does do a whole lot for us, but there is a limit.

"During these winter days there is special danger. So take a look around. A few minutes or a few hours' work in clearing up and getting rid of unnecessary hazards will pay immensely.

"Remember, every fire destroys, not only something of value to you individually, but takes away from our country which is bending all its energies to win a great war, something it needs. Take a look around!

EDITORIAL NOTES

The markets for building materials and supplies have been uniformly quiet during the past week. There has been a lack of orders and inquiries, but prices have remained practically stationary at the high levels that have now maintained for some time. Had there been a large volume of orders current the situation in the wholesale markets would have been aggravated because of the fact that the railroad congestion is still acute and deliveries only possible when materials are consigned for actual Government work.

* * *

It has been generally recognized that the war has, to all intents and purposes, demoralized the building industry. Not only in particular localities, but broadcast over the entire nation the effects have been felt. Practically the only line of building activity that has proceeded to any important extent during the past year has been that type of operation made necessary by the greatly enlarged program of military and naval warfare. Private construction has been confined to comparatively few dwellings and buildings for housing or community purposes, and at the present time there is a decided lack of facilities for housing and for the transaction of local business.

* * *

In 1917 total building permits granted in Pittsburgh were but 3,595, representing a total estimated cost of \$11,315,065—the smallest cost total of any year in nearly two decades. Permits were taken out in this city last year for only 2,059 new buildings, their estimated aggregate cost being but \$8,965,332, and of the total no less than 1,000 of the structures were garages, the large majority of which were private garages.

* * *

Reports from architects show very few dwellings being planned, either for homes or for rent, and with the constantly growing population the housing problem in Pittsburgh is becoming steadily more serious. This winter many artisans' families are occupying houses that are mere places of shelter—remodeled stables, coal sheds and the like, and in nearly all residential sections partly finished houses

can be seen which should have been completed months ago, but are delayed because of shortage of workmen and materials. Possibly when winter is over conditions in the building line here may change for the better, but the chance is a slim one at best.

* * *

Only two churches were built in Pittsburgh in 1917, one of which cost \$169,000 and the other \$19,000, and during the entire year permits were issued for only 318 dwellings; 18 dwellings with storerooms; 48 duplex houses; 14 store and flat buildings, the balance of the list being made up of factory, mill and warehouse structures. No new banking houses were built, and the only theatre for which a permit was issued was a \$150,000 motion picture house to replace the burned Grand Opera House. The outlook for 1918, in a building way, is not encouraging.

* * *

The 1918 convention of the National Association of Master Plumbers will be held in St. Louis, Mo., June 4th, 5th and 6th. This was announced following the meeting of the board which met in mid-winter session in St. Louis, Mo., last week. "Prospects are now," said President McNamara, "that the meeting this year will be the best, in the point of attendance, the master plumbers have ever held. The gathering here promises to be very large." The educational propaganda carried on during the last months has opened the eyes of the plumbers throughout the country, it is said, and they are all keen for new ideas that they have promises of being able to gain at the meeting. The arrangement committee is now making investigation of the carious hotels to decide which to select as headquarters for the convention. The board, in setting the date, decided on the June dates because they conflict less with school commencement week in various sections of the country.

* * *

The year 1917 holds the record for production of Portland cement, a total of approximately 93,554,000 barrels having been manufactured, an excess over the former high production of 1913 of nearly 1,500,000 barrels, and over the production of 1916 of more than 2,000,000 bar-

rels, or 2.2 per cent. The shipments in 1917 of approximately 90,630,000 barrels fell below those of the record year, 1916, by nearly 4,000,000 barrels, or about 4 per cent. Stocks at mills increased more than 2,800,000 barrels, or 33.7 per cent., as compared with 1916. Higher prices for cement prevailed throughout the United States except at a few plants in the Pacific Coast district. Higher prices were, however, accompanied by higher costs of manufacture. Demand for cement was generally very good during the first five to eight months of 1917, but showed a decided falling off during the remainder of the year. Labor and traffic conditions were, for the most part, unsatisfactory.

* * *

Bertrand H. Wait has entered the employ of the Portland Cement Association, and on February 1 took up his duties as District Engineer in charge of the New York office, 101 Park avenue. Mr. Wait is an associate member of the American Society of Civil Engineers, member of the Municipal Engineers of the City of New York, of the American Road Builders' Association and of the Cornell Society of Civil Engineers. He was graduated from Cornell University in 1902 with the degree of Civil Engineer. In 1903 he was appointed assistant engineer with the Rapid Transit Subway Commission, New York, and remained on this work until 1907, when he was transferred to the Board of Water Supply, City of New York. In 1911 he was transferred to the City Aqueduct Department as assistant division engineer of the Bronx Division, and in August of that year was made division engineer. In 1913 he resigned to accept the appointment as division engineer, New York State Highway Department, in charge of Division No. 1, which consisted of ten counties adjoining New York City. During the past year Mr. Wait has also served as consulting engineer for the U. S. Government on cantonment road construction.

* * *

Ralph C. Davison, for the past six years associated with the American Mason Safety Tread Company, in a selling and engineering capacity, has resigned his position and directorship with the above company to engage in a broader and more active field with the American Abrasive Metals Company, maker of Feralun Safety Treads and Anti-Slip surfaces.

* * *

C. G. Van Rensselaer, architect, 505 State street, Schenectady, N. Y., desires catalogues on solid steel sash.

* * *

Thomas J. Foster was recently elected chairman of the Board of Directors of the National Bridge Works, Long Island City, N. Y. He succeeded as president by H. B. Roger, general manager of the company.

* * *

Arthur R. Wilcox has been appointed president of Abendroth Brothers, pipe manufacturers, Port Chester, N. Y., to succeed R. Jay Walsh, who died recently. John M. Ellis has been elected treasurer and Charles I. Smith, secretary. Other officers are C. B. Elmer, vice-

president, and John W. Diehl, assistant treasurer.

* * *

Guy E. Tripp, New York, chairman of the Board of Directors of the Westinghouse Electric and Manufacturing Co., has been placed in charge of the Production Division of the Ordnance Department at Washington. The function of this division is to follow up, supervise and stimulate the production of all articles purchased by the Ordnance Department.

* * *

The Credit Association of the Building Trades of New York City recently published a pamphlet entitled "The Present Trouble with the Building Trades." This booklet relates the causes of the present unsatisfactory conditions in the building industry. The remedy suggested by this organization is a strong co-operation between all of the interests concerned.

New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the management of Louis W. Buckley. The floor space to be occupied equals 100,000 square feet.

* * *

American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building, New York City.

* * *

J. R. Bly has been promoted to the position of district sales manager for the Pittsburgh Water Heater Co., with offices and show rooms in the Jenkins Arcade, Pittsburgh. Mr. Bly has been with the company for a number of years and has come up, step by step, to his present position. He was formerly traveling representative covering West Virginia, which territory now comes under the Pittsburgh district office.

FIFTY HOUSES A DAY FOR ONE HUNDRED DAYS

Philadelphia Builders to Give a Demonstration of Rapid Building Without a Parallel in the History of American Construction.

Almost dramatic in its setting is the comprehensive plan to put up the 5,000 homes necessary to house the employees at Hog Island. Practically every Philadelphia contractor in the building trades offered to help in the construction of the "magic city" in the Fortieth Ward, but only 350 will be chosen for the operation.

Fifty houses a day, with the entire project completed in 100 days, is the program which municipal engineers and experts of the United States Shipping Board are preparing. In this task Philadelphia will demonstrate the ability of its workers to meet every demand of the Government. Said J. Rogers Flannery, chairman of the Federal Housing Commission:

"Contractors and laborers never before have displayed such patriotic enthusiasm as is evidenced in every offer I have received from men who are willing to give their time and experience that the workers on America's merchant marine may be quickly and comfortably accommodated near the Hog Island yard. All these offers have been referred to the special commission in charge of the work."

Maximum of Speed.

Under the "speeding-up" plan of the building experts an average profit of \$25 a house will be allowed. Fifty general contractors acting in the capacity of captains are to have supervision over the entire house-building project, each being allotted 100 buildings. With 300 specialists operating under them as sub-contractors the maximum amount of speed and minimum of confusion will accompany the operation, it is expected.

The 100-house contract units, according to the plans, are to be made up of the general con-

tractor in charge and six sub-contractors representing the excavations, mason, carpenter, painting, plumbing and roofing trades. They in turn will have supervision over the men employed in their particular line of work. This group system, with some minor changes, was suggested to the Federal Commission by some of the best-known contractors and builders in the country who volunteered their services to the Government.

Details Rapidly Worked Out.

As the Philadelphia project will be the first of a number of similar operations to furnish homes for Government workers, the contractors say they will set a pace hard to follow. While the construction work on the houses is under way street gangs will install the water and gas pipes, which the city is prepared to ship to the site next Monday. It is said that every detail has been worked out so that by June 1 Philadelphia will have an additional population estimated at 30,000.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggo give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

"SCAMPING" AT CAMP DIX.

Insulating Workmen Detected "Soldering" and Shipped Out of Camp.

Still another rebuke, for what amounted to fraud on the government, was administered to contractors' employees at Camp Dix, when 250 engaged in covering pipes at the Base Hospital were dismissed and handed their money. Those on the list had been engaged by the American Insulating Company and the operation which had been carried on by that firm will be completed by others.

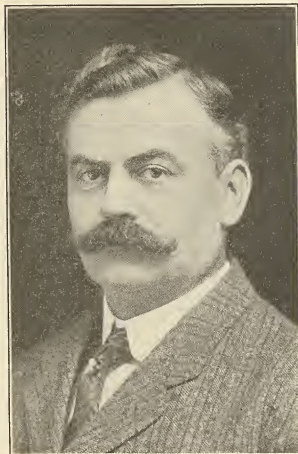
Species of thievery practiced by the pipe covering artists were declared to be more flagrant because of the urgency for their work and the character of the institution on which they were engaged. While there is comparatively little illness at Camp Dix, there is need to have the buildings in the best of condition for emergencies and heat is of primary importance. Pipes extend from a central power plant and their covering of asbestos, hair and other material in the spaces where they pass through the yards. The freezing winds quickly turn the steam into water and the burning of coal is practically a waste.

Encouraged, perhaps, by the record for "soldiering" on the main cantonment by other artisans, the insulating crew saw opportunities for the "gravy" which will remain one of the most reprehensible but seemingly unavoidable blots in the camp construction. Experience apparently came in handy, for the pipe men are declared to have exceeded the bolder of the other time killers drawing high pay.

Those who got under the wire as mechanics drew 66 2-3 cents per hour, or \$8 per day and their helpers \$6 per day, for double time from 7 to 8 in the morning and from 4.30 to 5.30 at night. They all reported in on the Sunday preceding Christmas instead of showing up for Christmas, and the helpers drew down \$10 for that day, and the mechanics boosted their ante accordingly. Like the stories of cobblers and tailors drawing the salaries of carpenters on the principal section of the cantonment, "workers" of various degrees of qualification got in on the pipe covering stunt. The chief occupation of some in the bands of keeping a sharp lookout for the government checkers.

Some weeks ago the number of the employees was taken and the different ones were asked about their qualifications, how long they had been members of the union and other embarrassing questions. Richard P. Hughes and James W. Dolan, agents for the Department of Justice here under the direction of Frank L. Garbarino, were also noticed frequently in the Base Hospital section and surrounded groups of the workers engaged in gossip took cover.

THE NEW PRESIDENT OF THE NATIONAL ASSOCIATION OF MASTER BUILDERS' EXCHANGES



COLONEL JOHN R. WIGGINS, President
National Association of Master Builders' Exchanges

At the recent convention of the National Association of Master Builders' Exchanges, held in the Smoky City, Colonel John R. Wiggins, of Philadelphia, was elected to the Presidency of that organization. Colonel Wiggins is a builder and man of affairs whose experience has been such that great things are looked for as a result of his elevation to head the federated builders' exchanges of the country. As a live wire, accustomed to dealing with modern principles of organization, Mr. Wiggins may be expected to inject new life into the organization. There is a peculiar fitness to President Wiggins' selection just at this time, when the need for organized action in the building trades is more acute than it has been at any previous period in the history of American building. We note that Colonel Wiggins is also chairman of a committee appointed by the Philadelphia Master Builders' Exchange to bring the building interests of the nation and the Federal officials into a closer understanding with reference to labor and minor problems. Acting with Colonel Wiggins on this committee are such representative Philadelphia builders and material men as F. M. Harris, Jr., William H. Johnson, Thomas P. Armstrong, Horace H. Burrell, Peter Gray, Joseph M. Steele, E. F. Henson, Cyrus Borgner, Howard B. French, George D. VanSciver and O. W. Ketcham.

ARCHITECTURAL LEAGUE OPENS THIRTY-THIRD EXHIBITION

Of Interest to All Identified with Arts and Crafts

[We are indebted to the New York "Real Estate Record" for the subjoined account of the Thirty-third Annual Exhibition of the Architectural League of New York, which opened its doors to the public on Sunday, February 3. More than the usual interest attaches to the exhibition of the League by reason of the fact that the year's display marks a notable departure from the average strictly architectural exhibition.]

With the usual reception to members and their friends, the Architectural League of New York opened its thirty-third annual exhibition in the galleries of the American Fine Arts Society, 215 West Fifty-seventh street, New York. This exhibit will continue to February 23. Unlike the exhibitions of previous years, a marked departure has been made in the presentation of this show, and as a consequence the interest in the exhibition should be greatly increased, as there is something for every lover of art, in all its forms, and for every one who owns or thinks of owning their home.

The Medals of Honor for this year were presented at a smoker held in the League rooms. The medal for architecture was awarded to Benjamin Wistar Morris and the

medal for sculpture to Paul Wayland Bartlett. No award for painting was made. The Henry O. Avery prize for sculpture was awarded to Raphael Menconi. The annual prize for collaboration in architecture, sculpture and painting was awarded to George Licht, architect; Raphael Menconi, sculptor, and F. E. Gates, painter. The Jury of Award consisted of H. VanBuren Magonigle, ex officio, chairman; Herbert Adams, Theodore E. Blake, Elmer E. Garney, Bertram G. Goodhue, H. A. MacNeil, Violet Oakley, Attilio Piccirilli, Herman T. Schladermaund and Egerton Swartwout.

The visitor to the Architectural League's exhibition of 1918 will be greatly uplifted by the beauty of the general effect and the great variety of the exhibits, and yet may possibly miss the real significance of this project. It was not conceived as a scheme to allure the public through beautiful fabrics, gorgeous wall paintings, rare furniture, or fascinating designs for homes. Its purpose is a far more worthy one than mere advertising. True, its outer aspect is a curious and somewhat unusual admixture of art and commerce, but its inner meaning is an exhibition of the best that is being made or executed in this country,

with the effect, by the deadly parallel of comparison with genuine antiques of the best period, to determine how good or how bad are the commodities we are turning out in these times.

There is still a bigger idea behind the venture. In addition to architects, the Architectural League has for many years included in its membership painters and sculptors. Today, it includes landscape architects, decorators, stained glass designers and makers, designers and craftsmen. In fact, most of the crafts and trades which produce materials and articles of aesthetic interest, are represented in the membership of the League, and the annual exhibitions have become functions of absorbing interest to all who care for architecture, and the allied arts and crafts.

The exhibition of 1918 is a collaborative one, and the idea of an architectural exhibition in collaboration with the building crafts is distinctly new. It may offend the stiff-necked, old-fashioned architect, who would have the atmosphere of the exhibition charged with Greek simplicity. It may seem to some as though the scenic effect had been deliberately made to dominate over the more serious and "architectural" quality of the exhibition. However, by looking beneath the surface, it will be noted that the exhibition represents the spirit of the times. We do not live with Greek simplicity. We are avid in our eagerness for progress. We long to strike the modern note without dragging the anchor which holds us strongly in the harbor of ancient treasures. To strike the modern note is to be generous to all comers, omitting only the shoddy, bizarre or unrefined.

Thus, in the Thirty-third Annual Exhibition of the Architectural League will be found frescoes by Gardner Hale, and mural paintings by Edith Emerson. Both are modern, and both are based upon ancient treasures. They are distinctly creative, though the one recalls medieval France, and the other, the Orient. The Batiks of Bertram Hartmand and of Arthur Crisp, the wrought metal work of Samuel Yellin, all are shown in the same rooms with sedate sculptor and monumental architecture. The catholicity which permitted such a mixture is the true note of this exhibition.

The entrance hall has been devoted to the display of stained glass by American designers. Furniture pieces and faience ornaments are shown to the right and left of the passageway leading to the first gallery. A skeleton background has been erected in a style that harmonizes beautifully with the various special features. In the first gallery the dominant color is turquoise blue, and the prevailing architectural style suggests an antique Italian palace. Many articles of decorative character are shown here, a number of which are of surpassing beauty and interest. The middle gallery has been hung with a golden canopy, supported by tall columns and pilasters. The coloring of the third gallery is in deep reds and orange, contrasted with a shadowy blue. In the second gallery is located the major portion of the plastic exhibits; and in the third, the architectural designs.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Apartment House, Forty-fourth and Walnut streets, Philadelphia. Architect, Frank C. Hood, 1620 Spruce street, Philadelphia. Owner, Pasquale C. Teti, Tenth and Catherine streets, Philadelphia. Brick, concrete and steel, 3 stories, 12 apartments, slag roof, hot water heating, electric lighting, tile and marble work, hardwood floors. Owner is taking sub-bids on all lines.

Store Building (alt. and add.), northwest corner of Eighth and Catherine streets. Architect, J. Ethan Fieldstein, Penfield Bldg., Philadelphia. Owner's name withheld. Brick, general interior alterations, 3 stories, 20x46 feet. Plans in progress. Too early for details.

Oil House, Pipe Rack and Locomotive Shop, Tacony, Philadelphia. Architect, private plans. Owners, Tacony Ordnance Corp., Tacony, Philadelphia. Iron and wood, 1 story, 17x23 feet, 85x35 feet and 24x23 feet. Ready roofing, roof ventilators, wire work. Owners taking bids, due as soon as possible. Barclay White Co., 1713 Sansom street; F. Mark Const. Co., Finance Building; Rust Eng. Co., Pennsylvania Building; and M. Moister Co., 3931 North Fifth street, are figuring.

Store and Apartments (alts.), 1702-04 Dauphin street, \$5,000. Architect, Edw. F. Bertollett, 1614 Cherry street, Philadelphia. Owner, Nathan Berg, Colorado and West Dauphin streets, Philadelphia. Brick and stone, 2 and 3 stories, 30x48 feet, tin and tile roof, concrete floors, tile and marble work, rolled steel sash, metal lath, metal ceilings, waterproofing, ornamental iron work. Owner is sub-letting.

Rooming House, northeast corner of Thirteenth and Rodman streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, J. Levin, 1309 South street, Philadelphia. Consists of renovating house, 3 stories, 16x56 feet, slag roof, yellow pine floors, electric lighting (heating reserved). Plans in progress. Owner will take bids in one week.

Residence (alts.) and Garage, 2311 North Broad street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, L. W. Hirsch, 3639 North Fifteenth street, Philadelphia. Consists of interior alterations, decorating, etc., and new garage. Plans in progress. Too early for details.

Convenience Station, Twenty-ninth and Tasker streets, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Department of Public Works, Bureau of City Property, Room 113, City Hall, Philadelphia. Brick, 1 story, 20 feet wide, hexagonal, slate roof, electric lighting, cement floor. Plans about completed. Bids will be taken in about one week.

Bank (alts.), Frankford avenue and Overington street, Frankford. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, Oxford Bank of Frankford, on premises. Consists of alterations to present heating system, mill work partitions, composition

flooring, electric lighting, tile work, plumbing, cut stone, metal ceilings. Architect taking sub-bids.

Power Plant, 2626 Martha street, Philadelphia. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owners, L. M. Leberman Sons, on premises. Brick and concrete. Plans in progress. Too early for details.

Hall (alts.) to Apartments, 4918 Baltimore avenue, Philadelphia. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owner's name withheld. Partitions, plumbing, electrical work (heating separate bids), interior alterations, tile work. Architects have received bids.

Store (alts. and add.), 38 South Fifty-second street, Philadelphia. Architect, Henry L. Reinhold, Jr., 1309 Walnut street, Philadelphia. Owners, Louis & Julius Winkelman, on premises. Consists of general interior alterations, metal bulks, 1 story, hardwood floors. Architect has received bids.

Store Building (alts.), northeast corner of Eleventh and Filbert streets, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, Harry C. Kahn, on premises. Consists of exterior and interior alterations, parquetry floors, tile and marble work, metal bulks. Architect taking bids, due February 26. E. E. Hollenback, Inc., 1804 Brandywine street; Wm. R. Dougherty, 1610 Sansom street; Charles McCaul Co., D. Henwood, 1509 Wood street; E. J. Kreitzburg, 1345 Arch street; Lam Building Co., 1001 Wood street; Harry Rust, 724 Ladow street, are figuring.

Residence and Garage, northeast corner of Fifth and Earg streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin sts.

Owner, Albert H. Leberman, southeast corner of Fifth and Wharton streets. Brick, 2 stories, 19x42 feet, slag roof, stone foundations, hot water heating, electric lighting, tile and marble work, hardwood floors; garage, 1 story, brick (1 car), slag roof, cement floor, electric lighting. Plans completed. Owner is tanning sub-bids.

Store Building (alt. and add.), 244-46 South street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner's name withheld. Brick, 3 stories, 31x40 feet, maple floors, hot water heating, combination lighting, flush bulks, metal ceilings. Plans completed. Architect ready for bids.

Aircraft Factory (extension), Office Building and Storehouse, Navy Yard, League Island, Philadelphia, \$2,000,000. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, Navy Department, Washington, D. C. Factory, 1 story, steel and concrete, 50x1,200 feet; office building, 3 stories, steel and concrete, 15x124 feet; storehouse, 6 stories, 150x200 feet. Plans completed. Owners will take bids, due February 21st. Cramp & Co., Denckla Building, and Warren-Moore Co., Colonial Trust Building, are figuring.

Temporary Office Building, Schuylkill Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, Q. M. Dept., Schuylkill Arsenal, Philadelphia. Brick, 3 stories, 78x70 feet, slag roof, waterproofing, ornamental iron work (steam heating, plumbing and lighting reserved), pine floors. Lowest bids submitted by Hogg Const. Co., 1634 Sansom street, \$27,779; Wark-Yardley Co., 1737 Filbert street, \$28,380; J. Sims Wilson Co., 1125 Brown street, \$28,942.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Apartment House, Tenth and Clinton streets, Philadelphia, \$5,000. Architects, Milligan & Weber, 320 Walnut street, Philadelphia. Owners, The Clinton, care of Preston Butler, Germantown and Chelton avenues, Germantown. Consists of restoration of building, fire damage. Contract awarded to Penn Realty Const. Co., 1404 Ruscomb street.

Open Shed, Ridge avenue and Calumet street, Philadelphia, \$2,000. Architect, private plans. Owners, Powers, Weightman & Rosengarten 916 Parrish street, Philadelphia. Concrete piers, timber and frame, 1 story, 105x67 feet, slag roof. Owners will build.

Factory, 1920-24 East Venango street, \$2,500. Architect, private plans. Owner, William Cargen, 3628 Frankford avenue, Philadelphia.

Brick, second story addition, 40x60 feet, slag roof. Contract awarded to Barnes Bros., 2080 East Willard street.

Office Building (interior finish), 292-24 Walnut street, Philadelphia, \$5,000. Architect, Charles Barton Keen, 1218 Chestnut street, Philadelphia. Owners, Charles E. Mather & Co., 226 Walnut street, Philadelphia. Consists of partitions, mill work, cabinet work, counters, interior trimming. Contract awarded to Kramer Woodworking Co., Third and Cumberland streets, Philadelphia.

Bulk Head Wall, West Philadelphia Stock Yards, Thirtieth and Market streets. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Concrete and timber, 12 feet high and 250 feet

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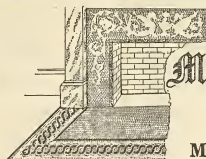
BOTH PHONES

long. Contract awarded to Monaghan & Losse, Inc., 3016 Chestnut street, Philadelphia.

Garage, Moore and Bambery streets, Philadelphia, \$20,000. Architect, private plans. Owner, Charles A. Shetzline, 2021 South Broad street, Philadelphia. Brick, 1 story, 55x200 feet, slag roof, cement floors. Contract awarded to H. F. Dinkelacker, 237 North Farson street, Philadelphia.

Factory (alt. and add.), Thirteenth and Wood streets, northeast corner, \$3,000. Architect, private plans. Owner, Mrs. E. Heid, 4615 Spruce street, Philadelphia. Brick elevator shaft, 5 stories, 10x10 feet, heating extension, electric lighting, rolled steel sash and skylights, fire doors, plumbing and millwork. Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Garage, Westmoreland and Tilton streets, Philadelphia, and **Store and Dwelling,** 2339 Almond street, Philadelphia. Architect, private plans. Owner, F. Pezzillo, 3347 Almond street, Philadelphia. Stone and brick; garage, 1 story, 14x69 feet, and 2 stories, 14x14 feet; residence, 2 stories, 14x36 feet, slag roofs, pine and cement floors, hot air and hot water heating electric lighting, fire doors, gasoline storage system. Owner will build.



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PENNSYLVANIA Construction News

Residences (18), Park Hill Manor, Bethlehem, Pa., Architect, Robert E. Ochs, City Realty Building, Bethlehem, Pa. Owner, M. K. Huffman, Wilbur Trust Building, South Bethlehem, Pa. Brick, 2 stories, slate and slag roof, pine floors. Plans in progress.

Residence, Allentown, Pa., \$25,000. Architect, David Levy, Allentown, Pa. Owner's name withheld. Hollow tile and stucco, 2 stories and basement, 45x32 feet, wing 24x17 feet, tile roof, hardwood floors, vapor heating, electric lighting, tile and marble work. Plans in progress. Architect will take sub-bids in one month.

Infirmary Building "S" and Tunnel to "K" Building, Spring City, Chester County, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institute for Feeble Minded Women of Eastern Pennsylvania, Spring City, Chester County, Pa. Brick, stone and steel, 2 stories, 181x20 feet and 80x40 feet, tunnel 225 feet, slag and slate roof, granolithic floors, steam heating, electric lighting, hollow tile, metal lath, elevators, metal weatherstrip, dampproofing, wire work, marble and terrazzo work, hollow metal and rolled steel and sash and skylights, fire doors, iron stairs, ornamental iron work. Owners taking bids, due March 6th at 10 A. M. F. W. Mark Cont. Co., Finance Building; Chas. McCaul Co., 1713 Sansom street; Frank G. Stewart, 1619 Sansom street; Standard Cont. Co., 1713 Sansom street; Wm. Linker Co., 831 Cherry street; W. W. Anstine & Co., 1218 Cherry street, and Wark-Yardley Co., 1737 Filbert street, Philadelphia, and Fred H. Kaiser, Potstown, Pa., are figuring.

Bungalow and Garage, Jenkintown, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner's name withheld. Stone and frame, 1½ stories, 25x60 feet, shingle

roof, hardwood floors, hot air heating, electric lighting, tile work. Plans in progress.

House and Tower, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care of W. A. Young, 427 P. O. Building, Philadelphia. Brick, 2½ stories, 24x32 feet, limestone trim; tower, reinforced concrete, 12x12 feet, slate roof, reinforced concrete and pine floors, iron stairs. Owners taking bids due March 14th, 2 P. M. Thos. C. Trafford, 1613 Sansom street, and W. W. Anstine & Co., 1218 Filbert street, Philadelphia, are figuring.

Outbuilding, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care of W. A. Young, 427 P. O. Building, Philadelphia. Brick, 1 story, 18x22 feet, concrete and slate roof, concrete floors. Owners taking bids, due March 14th at 2 P. M. Thos. C. Trafford, 1613 Sansom street, and W. W. Anstine & Co., 1218 Filbert street, Philadelphia, are figuring.

Foundry Building, Berwyn, Pa. Engineer, Robert F. Norwalk, Berwyn, Pa. Owners, American Bronze Corp., Berwyn, Pa. Brick, steel and concrete, 1 story and mezzanine floor, 82x100 feet, Barrett roof, cement and maple floors, hollow tile, metal lath, rolled steel sash, iron stairs, waterproofing (heating, lighting and plumbing reserved). Owners have received bids.

Chapel (alts.), Valley Forge, Pa. Architects, Zantinger, Borie & Medary, Otis Building, Philadelphia. Owners, Washington Memorial Chapel, Valley Forge, Pa. Consists of paving walks, mill work. Architects taking bids, due as soon as possible. H. H. Burrell, 206 South Quince street, is figuring (only bidder).

Post Office, Sunbury, Pa.. Architect, James Wetmore, Treasury Department, Washington,

D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick, 1 story, concrete foundations, 88x66 feet, composition roof, steam heating, electric lighting, marble and terrazzo work, fire doors, metal lath, wood floors, roof ventilators, metal weatherstrips, dampproofing, ornamental iron work, wire work. Owners taking bids, due March 12th. D. J. McNamee, 1621 North Fifteenth street, additional bidder.

Bungalow, Hershey, Pa., \$7,000. Architect, George Grove, 215 Walnut street, Harrisburg, Pa. Owner, Christian Garman, Hershey, Pa. Frame, 1 story, 30x50 feet, slate roof, hot water heating, electric lighting pine floors. Owner will build.

Residences (4), New Cumberland, Cumberland County, Pa., \$6,000. Architect, private plans. Owner, Lawrence Petrow, New Cumberland, Pa. Brick and frame, 3 stories, 15x30 feet, shingle roof, pine floors, hot water heating, combination lighting. Owner will build.

Residences (6), Berryhill and Seventeenth streets, Harrisburg, Pa., \$13,500. Architect, private plans. Owner, Morris Strohm, 1534 Derry street, Harrisburg, Pa. Brick, 3 stories, 14x50 feet, slag roof, pine floors, hot water heating, combination lighting. Owner will build.

Garage, 296 South Eleventh street, Harrisburg, Pa., \$25,000. Architect, private plans. Owners, Yoffee Brothers, 296 South Cameron street, Harrisburg, Pa. Reinforced concrete and brick 1 story, 61x131 feet, and 2 stories, 61x91 feet, slag roof, cement and pine floors, steam heating, electric lighting, rolled steel sash and skylights, fire doors, roof ventilators, gasoline storage. Owners taking bids, due as soon as possible. Frank J. Saussman, 1713 North street, Harrisburg, Pa., is figuring.

Garage, Fifteenth and Howard streets, Harrisburg, Pa., \$12,000. Architects, Fahnestock & Raibach, Patriot Building, Harrisburg, Pa. Owner, C. L. Conover Holly and Hillside streets, Harrisburg, Pa. Brick and concrete, 1 story, 115x120 feet, slag roof, steam heating, electric lighting, cement floors, rolled steel sash, hollow metal skylights, roof ventilators. Owner is taking bids.

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Residence (alts.), Langhorne, Pa. Architect, Wesley L. Blithe, 608 Chestnut street, Philadelphia. Owner, Lloyd F. Schultz, Langhorne, Pa. Stone and stucco, 3 stories, 40x30 feet, tin roof, parquet floors, hot water heating, electric lighting, porch and general interior alterations. Plans in progress. Architect will be ready for bids in about one week.

Rooming House, Laurel street and Sharon avenue, Sharon Hill, Pa. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, J. J. Kennedy, Jr., 1001 Chestnut street, Philadelphia. Consists of altering hall to rooming house, new stairways, plaster partitions, plumbing, steam heating, electric lighting. Owner is sub-letting all contracts.

Residence, Pottstown, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, E. D. Gudebrod, Pottstown, Pa. Stone or stucco, 2½ stories. Plans about completed. Architects will take bids in a week or ten days.

School, Lower Saucon Township, Bethlehem, Pa. Architect, A. W. Leh, South Bethlehem, Pa. Owners, Lower Saucon School District, care of Lower Saucon Township, Bethlehem, Pa. Brick, 2½ stories, 26x71 feet, slate roof, pine floors, hot air heating, electric lighting. Plans about completed.

Women's Welfare Building, South Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., care of Mr. Tobias, P. A., South Bethlehem, Pa. Brick and steel, 2 stories, 60x65 feet, J. M. Riegel roof, pine floors, steam heating, electric lighting. Revised plans in progress.

Apartment House (alt. and add.), South Bethlehem, Pa., \$10,000. Architect, David Levy, Allentown, Pa. Owner's name withheld. Brick, 3 stories, 27x140 feet, yellow pine floors,

plastering, plumbing, mill work, electric lighting. Plans in progress.

Store Building (alts.), Norristown, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Kennedy's, Inc., 52 East Main street, Norristown, Pa. Consists of interior and exterior alterations, metal bulks, hardwood floors, etc. Architect taking bids, due February 25th at 11 A. M. Lam Building Co., 1001 Wood street; Smith-Hardican Co., 1006 Cherry street; B. Bornstein, 1510 North Franklin street; Raith Const. Co., 302 Master street, Philadelphia; Wm. H. Schoffner, Frank R. Heavner, Elmer O. Reher, and Daniel H. Daub, all of Norristown, Pa., are figuring.

Power Plant, Indian Creek and B. & O. R. R., Fayette County, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, Mountain Water Supply Co., Commercial Trust Building, Philadelphia. Reinforced concrete, hollow tile and stucco, 1 story and basement, 31x71 feet and 12x56 feet, slate roof, plastering, cement floors, hot water heating, electric lighting, rolled steel sash, hollow tile, metal lath. Owners taking bids, due March 4th. Jacob Myers & Sons Co., Witherspoon Building; H. H. Wehmeyer, 1004 West Lehigh avenue, Philadelphia; Nuola Building Co., Pittsburgh, Pa.; Connellsville Const. Co., Connellsville, Pa., and the Duquesne Const. Co., Pittsburgh, Pa., are figuring.

Cottages (3), Indian Creek and B. & O. R. R., Fayette County, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, Mountain Water Supply Co., Commercial Trust Building, Philadelphia. Frame, clapboard and shingle, 2½ stories and basement, (2) 26x30 feet and (1) 33x28 feet, slate roof, pine floors, hot water heating, electric lighting, copper gutters, plumbing. Owners taking bids, due March 4th. Jacob Myers & Sons Co., Witherspoon Building; H. H. Wehmeyer, 1004 West Lehigh avenue, Philadelphia; Nuola Building Co., Pittsburgh, Pa.; Duquesne Const. Co., Pittsburgh, Pa., and the Connellsville Const. Co., Connellsville, Pa., are figuring.

State Hospital (add.), Nanticoke, Pa. Architects, McCormick & French, Second National Bank Building, Wilkes-Barre, Pa. Owners, State Hospital of Nanticoke, Nanticoke, Pa. Stone, brick and steel. Coal pocket, 8 feet high, 58x16 feet; kitchen, 1½ stories, 29x40 feet; laundry, 2 stories, 58x25 feet; boiler room, 1 story, 68x30 feet, asphalt roof, concrete and tile floors (steam heating, electric lighting and plumbing reserved), tile and marble work, rolled steel sash, hollow metal skylights, fire doors, metal lath, waterproofing, wire work. Owners taking bids, due March 2nd. Metzger & Fisher, Otis Building, Philadelphia, and Curtis & Co., Wilkes-Barre, Pa., are figuring.

PENNSYLVANIA

Contracts Awarded

Mill Building, Easton, Pa. Architect, H. J. Wenzelberger, Easton, Pa. Owners, F. F. Bixler Co., Easton, Pa. Brick and mill, 1 story, 54x112 feet, slag roof, concrete floors (steam heating reserved), electric lighting, hollow metal sash and skylights, fire doors. Contract awarded to F. J. Lerch & Co., Easton, Pa.

Employment Office, South Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., care of Mr. Tobias, P. A., South Bethlehem, Pa. Frame, 1 story, 135x27 feet, composition roof, pine floors, steam heating, electric lighting. Contract awarded to Robert Rathbun, Bethlehem, Pa.

Church, Palmerton, Pa., \$35,000. Architect, J. F. Reilly, 725 Hamilton street, Allentown, Pa. Owners, SS. Peter and Paul Greek Cath-

olic Church, Palmerton, Pa. Brick, 1 story and gallery, 42x92 feet, slate roof, maple and pine floors, steam heating, electric lighting. Contract awarded to Butz & Clader, Allentown, Pa.

Cottages (2), Laurelton, Union County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Pennsylvania Village for Feeble Minded Women, care of State of Pennsylvania, Miss Nora P. Brown, president, Lancaster, Pa. Stone and brick, 2½ stories and basement, 77x53 feet and 100x84 feet, slag and slate roof, composition and pine floors, stone foundations, hot water heating, electric lighting, ornamental iron work. Contract awarded to W. D. Steinbach's Son, Lewistown, Pa.

NEW JERSEY

Construction News

School, Phillipsburg, N. J., \$30,000. Architect, H. J. Wenzelberger, Easton, Pa. Owners, School Board, care of A. R. Case, secretary, Phillipsburg, N. J. Brick, 2 stories (6 rooms),

slag roof, maple floors (steam heating, electric lighting, ventilating and plumbing reserved), terrazzo work. Revised plans in progress. Owners will take bids in two weeks.

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County Court House (alt. and add.), Belvidere, Warren County, N. J. Architect, H. J. Wenzelberger, Easton, Pa. Owners, Board of Chosen Freholders, Belvidere, Warren County, N. J. Brick, fireproof construction, 2 stories, 16x37 feet, slate roof, reinforced concrete floors, steam heating, electric lighting, fire doors, iron stairs. Plans in progress.

Pier, Trenton, N. J. Engineer, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owners, City of Trenton, care of Eng. Dept., City Hall, Trenton, N. J. Concrete, steel and corrugated iron, 1 story, 189x50 feet, L shaped, reinforced concrete roof. Owners have received bids.

School (add.), near Riverton, N. J. Architect, Arnold H. Moscos, 136 South Fourth street, Philadelphia. Owners, Cinnaminson School Board, care of Benj. Lippincott, District Clerk, Riverton, Burlington County, N. J. Brick, 2 stories (4 rooms), addition, 23x64 feet, slate roof, pine floors (plumbing, heating and lighting reserved). Architect has received bids.

Store and Apartments (alt. and add.), Salem, N. J. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owner's name withheld. Brick, general interior alterations, plastering, (3 stories), plumbing, mill work, hardwood floors, metal bulks. Plans about completed. Architect ready for sub-bids.

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Camden, N. J., \$3,500. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owner, Howard J. Dudley, on premises. Consists of general interior alterations, maple floors, metal lath, metal bulks. Plans in progress. Architects will take bids about March 15th.

Factory, Delanco, N. J. Architect, Howard A. Lippincott, Palmyra, N. J. Owners, The Consolidated Paper Tube Co., 810 Sansom street, Philadelphia. Brick, 2 stories and basement, 80x49 feet, Barrett roof, cement and maple floors, hollow tile, roof ventilators, hollow metal sash, fire doors, fire escapes (elevator, composition shingles, sprinklers, heating and lighting reserved. Architect taking bids, due February 27th. Smith-Hardican Co., 1606 Cherry street, is figuring.

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DELAWARE

Construction News

Y. W. C. A. Building, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owners, Y. W. C. A., Wilmington, Del. Brick and steel, 85x150 feet, tile roof, tile and hardwood floors, steam heating, electric lighting, gas lighting, tile and marble work, hollow tile, metal lath, elevators, waterproofing. Revised plans in progress.

Theatre, Twenty-third and Market streets, Wilmington, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. David Rossman, Twenty-third and Market streets, Wilmington, Del. Brick, fireproof construction, 1 story and balcony, 45x100 feet. Plans in progress.

Store and Apartments (alt. and add.), Sixth and Shipley streets, Wilmington, Del., \$12,000. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owners, Ed. Reynolds Sons, Wilmington, Del. Brick, 4 stories, 24x45 feet, slag roof, pine floors, combination lighting. Plans in progress.

Apartments (24 family), Twenty-ninth and Market streets, Wilmington, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. David Rossman, Twenty-third and Market streets, Wilmington, Del. Brick and terra cotta, 4 stories, 112x90 feet, slag roof, pine and hardwood floors, combination lighting. Plans in progress.

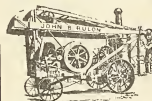
Moving Picture Theatre, Newcastle, Del., \$10,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, John L. Tobin, Wilmington, Del. Brick, fireproof construction, limestone trim, 1 story and basement, 30x100 feet, slag roof, steam heating, electric and gas lighting, tile and terrazzo work, concrete floors. Plans in progress.

Store and Office Building, between Eighth and Ninth on Market street, Wilmington, Del., \$20,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner's name withheld. Brick, 3 stories, 30x100 feet, slag roof, steam heating, combination lighting, tile work, metal bulks, tile and hardwood floors, metal lath, metal ceilings. Plans in progress. Too early for details.

Garage, Tenth and French streets, Wilmington, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. S. G. Elbert, Eighteenth and French streets, Wilmington, Del. Brick, 3 stories, 100 x115 feet, concrete roof and floors, electric lighting, rolled steel sash and skylights, fire doors, metal lath, elevators, gasoline storage. Architect is taking sub-bids.

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Miscellaneous Construction News

Office Building, No. 2815, U. S. Armor Plant, Charleston, W. Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parker, Navy Department, Washington, D. C. Brick, stone and concrete, 2 stories and basement, 136x55 feet, tile and slag roof, linoleum, tile and cement floors, electric lighting, tile work, hollow tile, rolled steel sash and skylights, ornamental iron work, metal lath, roof ventilators, waterproofing, dampproofing, wire work. Lowest bid submitted by Wills-Engle-hoff Co., 101 Park avenue, New York City, \$71,884.

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PERMITS FOR Alterations and Additions

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Philadelphia

Store and Dwelling, 1729 South Sixth street, \$1,200. J. Blinder (O), 443 Titon street. David Feldsher (C), 402 McKean street. New front and alterations.

Warehouse, Stillman and Jefferson streets, \$4,000. Supplee, Wills-Jones Milk Co. (O), 1551 North Twenty-sixth street. Cooling Tower Co. (C), 11 John street, New York. Iron tower on iron frame, 19x32 feet, 32 feet high.

Factory, Ridge avenue and Calumet street, \$2,000. P. W. R. Co. (O and C), 916 Parrish street. Open shed, pine columns, beams and rafters, concrete piers, slag roof, 1 story, 105x67 feet.

Rooming House, 142 North Eighteenth street, \$1,000. James A. Bunting (O), Drexel Building. Brownworth & Co. (C), 1611 Sansom street. Fire escape.

Office, Tenth and Columbia avenue, \$500. James E. Tague & Co. (O and C), on premises. Brick, 1 story, 8x16 feet, slag roof.

Dwelling, Natrona and Winter streets, \$1,000. Isaac Solomon (O), 824 Snyder avenue. D. Goldstein (C), 358 Ritner street. Repair roof and fire damage.

Green House, Frankford and Dark Run Lane, \$300. Charles M. Weikey (O), on premises. Charles G. Gilmore (C), 1312 Orthodox street. Frame, 1 story, 20x58 feet.

Store, 1027 Market street, \$925. John M. Schwelms Sons (O), 13-15 Wister street. L. Snyder & Son (C), 260 North Marvine street. Alterations.

Store, 11 North Ninth street, \$1,000. A. Waldman (O), on premises. C. F. Roege (C), 51 North Hutchinson street. Alterations.

Store, 235 North Thirteenth street, \$1,000. Sol Hopkins (O and C), 1330 Arch street. Fire damage and repairs.

Store and Dwelling, 930 North Seventh street, \$300. W. Cooper (O), Seventh and Poplar streets, northwest corner. A. Warshovsky (C), 543 North Seventh street. New front, alterations.

Saloon, 500 Richmond street, \$700. Dennis Macintyre (O), 501 Richmond street. John Stoll (C), 311 East Girard avenue. Hot water heating.

Stable and Shop, 2829 Dauphin street, \$3,000. Camp No. 478, P. O. S. of A. (O), 2325 Fletcher street. Charles L. Gum (C), 2546 North Twenty-ninth street. Brick, 2 stories, 18x22 feet, slag roof and alterations.

Studio, 613 Market street, \$1,000. Swartz & Robertson (O), 511 Market street. A. H. Spenard (C), 822 Wood street. Alterations.

Store, Twenty-ninth and Poplar streets, \$400. E. Rooperman (O), on premises. Herman Voigt (C), 1251 North Twenty-eighth street. Change first floor front.

Garage, Bott street, south of Kerbaugh, \$700. C. W. Cfoer (O), 4615 North Broad street. D. Schroech (C), Seventeenth and Erie avenue. Brick, 1 story, 17x24 feet, stone foundation, slag roof.

Store and Dwelling, 249 South Eighth street, \$500. Fred L. Shissler (O), 727 Spruce street. Louis Rodin (C), 2328 South Third street. New flush bulk.

Store and Dwelling, 5908 Wayne avenue, \$2,000. A. Pasquarello (O), 5906 Wayne avenue. J. Roman (C), 4521 Pulaski avenue. Alterations.

Store and Dwelling, 1704 Dauphin street, \$3,000. Nathan Berg (O and C), 1615 Dauphin street. Alterations.

Store, 812 Arch street, \$600. Keineth estate (A. Newman, ext.) (O), 928 Arch street. A. M. Barclay (C), 113 North Sixth street. Low pressure heating system.

Apartment, Tenth and Clinton streets, \$5,000. Preston Butler (O), Germantown and Chelten avenues. Penn Realty Const. Co. (C), 1404 Ruseomb street. Fire repairs.

Dwelling, 1938 South Galloway street, \$600. H. Cohen (O), 1908 South Galloway street. David Laikin (C), 2011 South Fifth street. Repair fire damages.

Factory, 1920-24 East Venango street, \$2,500. William Cargen (O), 3628 Frankford avenue. Barnes Bros. (C), 2080 East Willard street. Brick, second story addition, 40x60 feet, slag roof.

Garage, 1509-11 Germantown avenue, \$975. Harry Katz (O and C), on premises. Steam low pressure boiler.

MR. ARTHUR BROWN, JR., ACCEPTS CHAIR OF ARCHITECTURE AT HARVARD UNIVERSITY.

Mr. Arthur Brown, Jr., of the firm of Bakewell & Brown, architects of the new San Francisco City Hall, Horticultural building at the Panama-Pacific Exposition, and other notable structures, is going to the Harvard Faculty for the spring term. Mr. Brown will continue his work with Bakewell & Brown as heretofore, and be constantly in consultation with the San Francisco office.

Mr. Brown graduated from the college of civil engineering of the University of California in 1896, and in 1898 was admitted to the Ecole des Beaux Arts in Paris, where he studied under M. Laloux, the famous French architect. He won many honors in Paris, including nine first medals, the first prize in the Godeboeuf prize competition, in 1900, and the second prize in the Rougevin competition, in 1903. He was awarded his diploma as a licensed architect by the French government in 1901, and received the Grande Medaille de la Societe des Diplomes in 1901-02.

Mr. Brown has practiced architecture in San Francisco since 1904, as a member of the firm of Bakewell & Brown. He was a member of the faculty of the school of architecture of the University of California in 1907. For a number of years he has conducted in San Francisco a successful atelier for the Society of Beaux Arts Architects. He is a member of the American Institute of Architects and a former director of the San Francisco Institute of Art, of which Mr. Bernard Maybeck is the new president.

WHY SOME CONTRACTORS FAIL TO MAKE MONEY.

From time to time there is extended discussion of why contractors fail to make money. One sees discussions of the subject bearing on almost all phases of the matter, but rarely is there any question as to the competency of the men who hold the contracts. And, indeed, this is not a surprising thing, for contracting is an honorable and an honored business, and many who engage in it are among the leading men of the day.

On the other hand, many small undertakings, especially in the line of public works, fall into the hands of men who are not possessed of great experience, and who, no matter how well they intend to do, are nevertheless handicapped by this lack of experience. An example of this kind is cited by a writer in Engineering and Contracting, who has had occasion to visit small undertakings and has had opportunity to

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observe the wonderfully low efficiency in handling men which many small jobs show, and it has often been a question in his mind as to whether the ordinary foreman knows how to find out even the most elemental facts as to how steadily his men are working.

One very good way to do this is to find a place where one can watch a force of men at work without being too closely observed, and then count the idle men, the count being repeated every minute over a period of fifteen or twenty minutes and repeated two or three times a day. Thus on a job in Iowa the following record was recently made:

On the job: One foreman, one inspector, eight laborers, in sight. (There were two or three others on the job who could not be seen from the point where the counts were made.)

Count	Men	
	Men idle.	at work.
2.31	4	4
2.32	4	4
2.33	6	2
2.34	3	5
2.35	8	0
2.36	5	3
2.37	6	2
2.38	4	4
2.39	3	5
2.40	2	6
2.41	5	3
2.42	7	1
2.43	7	1
2.44	4	4
2.45	6	2
74		46

Average idle, 5.

Average at work, 3 plus.

The unescapable impression which this simple count gives is that more than half of the time of the men employed on this job was being lost. If to this one adds the time of the foreman, who in this case did nothing but "boss the job," the condition of affairs seems even worse.

There is nothing new or original in this simple count to determine the elementary questions as to how much positively wasted time there is on a job, but if more contractors would adopt it there would be more of an effort to save labor by arrangements of the force which would eliminate the lost labor.

On the job in question a mixer was running at full speed during the whole period of the count. It had been running for some hours before the count was taken and ran on after the count was made. Three of the eight men fed sand and gravel to the mixer. The sand and gravel were not separate, but were mixed together, the ag-

gregate being a run of pit material used without screening. One of these men was always idle. Two should have fed the mixer with ease, even though it seemed that the aggregate had been unloaded farther from the mixer than was necessary or advisable.

One man brought cement to the mixer. He was a dead expense, and idle over half of the time. The cement could just as well have been unloaded on a platform where the man who tended to the mixer could have gotten at it without assistance.

Another man pumped water for the mixer. A small power pump connected to the mixer engine should have handled this work. This man was idle two-thirds of the time.

The man to tend the mixer was needed, but the man who dumped the mix and shoved it down a trough set at light slope when it should have been set steep enough to permit the concrete to run or, better still, when the mixer should, as in this case, have dumped direct into the forms, was a dead loss.

The man who tamped the concrete in the forms was needed, but he should have also tended to dumping the batches as they were mixed. Thus careful management would have cut this force of eight men to four men, and it is not asserting too much to say that none of the four would have been overworked.

Inquiry was made as to the financial side of this job. It had lost money. No wonder! Using two men to do one man's work is seldom profitable.

THE PICTURESQUE ENTRANCE.

Someone has said that the hall is to the home what the preface is to a book,—only that one can skip the preface if one wants to, but must go clear through the hall. In that case the entrance must be the frontispiece, or perhaps even the front cover. In any case one can hardly get to the inside without passing it, and one enters the house under the impression given by the entrance.

It is curious how the judgment is swayed, often by the merest thread of an impression. We find what we are looking for. We see what the mind tells us, quite as much as what the sense of sight actually brings to the brain. Business people and advertising campaigns are making a scientific study in order to make the immediate impression which they desire and then to establish and verify that impression. Before they enter a house the guest who is a stranger has made up her mind, by the thousand and one trifles which go to make up an impression, as to the sort of a person she is to meet. Even the uniformity of the flat and apartment house does not leave a blank impression. Personality will assert itself by selection if no freer expression is allowed to it.—"Keith's Magazine."

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

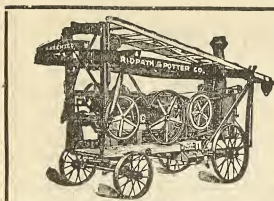
The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
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SUPERVISION OF FEDERAL LABOR NECESSARY

Need for Co-Ordination in Handling Industrial Problems Urged by Mayor's Committee on National Defense

Elaborate Federal supervision to solve the problems created by the present labor situation is urgently recommended in the report just issued by the Committee on Industry and Employment.

The report is a comprehensive view of the facts obtained in an intensive study of the industrial situation here and abroad, covering many months. It describes in detail the work now going forward. Its recommendations are based on an analysis of the State or the country to-day in regard to labor, as shown by a searching inquiry into the effectiveness, or lack of it, of the agencies set up to relieve evils now existing.

The demand for Federal regulation is based primarily on the crying need for reform shown by the war emergency; and on the specific experience of New York City in attempting to deal with conditions.

America's methods in handling labor problems are extremely diverse. In this connection the report says:

"An analysis of our present system shows the following types of public bureaus which are of sufficient extent to demand recognition: Federal Public Employment Bureaus, State Public Employment Bureaus, Municipal Public Employment Bureaus, Public Employment Bureaus operated in co-operation between the Federal and State governments, in co-operation between the Federal, State and municipal governments, and at least one instance of bureaus under the administration of the Federal, State, city and county authorities. By far the largest class is the private commercial bureau, operating for gain, with a long list of accusations and denunciations filed against it. Many trade unions either have an actual employment system or informally place their members. In the employment work of philanthropic societies, there is an infinite variation, including such as is

done incidentally by relief organizations, by church and settlement houses, by trade schools, by immigrant societies, and by private organizations for the specific purpose of operating an employment bureau. Employers' associations in some trades operate employment bureaus largely for the purpose of combating the effectiveness of trade unions.

"If we are to extend our system and organize it on a basis which will do the work of the present emergency, the most important nucleus is, of course, the different kinds of public bureaus. Of these the Monthly Review of the United States Bureau of Labor Statistics for September reports the following: Federal Employment offices in twenty-eight States and the District of Columbia; State Employment offices in seventeen States; Municipal offices in seven States; Federal State Employment offices in two States; Federal, State, County and Municipal offices in one State; State Municipal offices in three States.

"In the administration and organization of each group there is equal variation. The following brief summary gives the main points in each:

The Federal Offices.

"These are incorporated in a Division of Information under the Bureau of Immigration of the Department of Labor. Authority for their operation is extremely doubtful, coming under the authorization of the Bureau of Immigration to obtain employment for immigrants 'and others.' They have been inadequately financed out of the money coming to the Bureau of Immigration from the Immigrant Head Tax. In all cases, they are simply local employment offices and, while often doing a certain amount of interstate business, they have no co-ordinating control over any of the State or municipal offices, nor does their admin-

istration provide for adequate mutual co-operation. In September, fifty-one of these bureaus were listed in the twenty-eight States, but in only twenty-eight were there placements of over one hundred people. Five of the Federal bureaus work in co-operation with State or municipal bureaus, but in most cases as at present organized, they simply aid to the duplication and lack of administrative uniformity already existing.

State Bureaus.

"Seventeen States operate one or more public employment offices. In some cases the State operates simply an individual office or two in the largest cities. In others an attempt is made to cover the field by a chain of offices. In no case, are we able to find that it does so with central clearing houses to link up the different branches. Administration is usually under the State Bureau of Labor Statistics, the Department of Labor, Industrial Commission, or whatever administrative machine of this kind exists. Often their supervision is an adjunct to the work of some already very busy official.

Municipal Bureaus.

"These have, in many cases, as in New York, arisen out of a local program for relief in time of great unemployment. Often they are the result of political manipulation with patronage as their immediate aim. From the very nature of the cases, there is a total lack of uniformity in their administration and organization, and they may be under a Charitable Department, Department of License, Comptroller, directly administered by the Mayor, or whatever department happens to be handy at the time of their organization. Some of them are without doubt doing good work, but the majority are inadequately staffed, poorly financed, and handle largely unskilled and domestic labor.

Summary.

"Such in general is our American system. Investigations have continually reported that the work of all of our public bureaus has in most cases been of a very inefficient nature. Offices are generally poorly equipped. Unskilled labor predominates in the men handled. Uniform records do not exist. Most of the bureaus are under-staffed and the workers under-paid. Seldom are they looked on with anything like universal favor by employers or by trade unions. The picture, it is true, has a bright side. Great advances have been made within the past five years and the importance and theory of the work have been gaining wider recognition."

In pointing out the necessity for Fed-

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eral supervision the report states:

"From the standpoint of the country as a whole, especially in the present crisis, some form of Federal Employment Service is an imperative necessity. Available labor everywhere must be registered at recognized places. Likewise, we must localize and register the demand. The entire field must be covered. It will not do to have employers in one State or city registering their demand in certain places and employees in that section applying to entirely different places. We must not have employers in a plant in one State stealing employees from another and this made possible because there is no central office which is in touch with labor at all points. If we are to have a Public Service Reserve, we must have a uniform machinery with which to enroll that reserve. If we are to shift any large number of laborers from one section of the country to another we must have a uniform administration which will advance care and which can authoritatively assure workers that the job is there, and the employer that a man with the proper credentials is being sent to fill it. Whatever may be the inherent limitations of the public employment bureaus, an adequate machinery of this kind is absolutely necessary as a first step toward meeting our industrial needs."

The report sketches the British plan, a highly specialized system of labor exchanges, which is working very successfully in the present crisis. It also refers to Germany's organization, in which the Teuton apparently does not live up to his reputation for doing things thoroughly.

The committee's recommendations, embodied in the Robinson-Keating Bill, now before Congress, are described in the following passages of the report:

"In considering the form of employment service which should be adopted in this country, we must consider two important factors. We must build it with a view to getting immediate results in order to meet the present demands of the Government and we must put in on a firm enough foundation to insure its becoming a permanent factor in our industrial organization. No half way measure will accomplish either purpose, and as we conceive it, one assures the others, for in each case the same factor must be dealt with and the same methods used.

"Shall we then follow the example of England and scrap municipal and State agencies, turning the whole matter over to the central Government? That hardly seems wise. A good deal of usable machinery exists in our present bureau, which if properly utilized, would be of very material value. Moreover, the extent of the

territory to be covered, the difference in local conditions and the value of local effort and co-operation, makes such a system more or less impractical, especially in view of the immediate war demand. Obviously, it will not be enough simply to endeavor to increase the work as it is being done at present.

"It seems to this committee that the basic elements of an employment machinery which will meet the needs of our situation are contained in the bill which it approved last summer and which has now been introduced, with some modifications, into both houses of Congress. Its main points were as follows:

"First: A Federal Employment Service in the Department of Labor is provided for with a director appointed by the President. His salary shall be \$5,000 per year.

"Second: \$1,000,000 is appropriated to meet the expenses of operation up to June 1, 1918, and \$2,500,000 to reach succeeding year.

"Third: This point provides that one of the functions of the Federal Service shall be to aid, and in general increase the effectiveness of the State and Municipal public bureaus. Instead of abandoning existing local machinery, as was done in England, and setting up a complete chain of Federal offices, the Federal Bureaus are authorized to co-operate with them in every way possible, to secure uniformity and standardization of method and in general stimulate them to greater activity. To this end district Clearing Houses are to be established which, under the directorship of an able man, will have jurisdiction over all local offices in that district. Each local municipal bureau will be asked to adopt records approved by the Federal organization, to report daily to the district office any calls which it is unable to fill, and in other ways to co-operate in linking the work already being done into a uniform service.

"Fourth: In order to offer an inducement to State and local bureaus to co-operate in this way and to provide a greater assurance of Federal control, it is provided that \$1,000,000 for the remainder of this fiscal year, and \$2,500,000 for ensuing years to be appropriated, for allotment to the State in proportion to the sum which each State has expended or appropriated for the maintenance of public employment offices during its fiscal year. This sum is allotted on the condition that the State makes a continuing equal appropriation for the succeeding year and that its 'public employment offices shall be operated in accordance with the provision of their Act and of the rules and regulations prescribed from time to time.'

"Other important features in this bill provide that the Federal Service shall continuously receive information regarding the general condition of employment throughout the United States and shall publish that information from time to time. Provision is also included for co-operation with the Postal authorities with a view to utilizing rural mail carriers and small town postmasters in small communities where an employment office is impractical.

"These are the most important administration features of the Bill. Neutrality in strikes is, of course, provided for and plenty of discretion is allowed to the director in working out the details of the whole system. If it is adopted it will enable us to put into immediate effect a Federal Service which will utilize and co-ordinate all of the work at present being done. It will place final administration and supervision in the hands of the National Director, but will allow for, in fact, distinctly encourage, local administration and development.

"It is distinctly a constructive measure and one which will make for permanent improvement besides meeting our very pressing war needs."

THE SMALL HOUSE.

The demand is ever increasing for new ideas in constructing small homes. The architecture of every nation is studied by the home-builders of to-day, and every national style,—particularly the French, Spanish, Italian and English have wielded an influence in present-day building.

Simplicity is a charm that belongs unalterably to the small house and is lost the moment the structure assumes any of the pretentiousness of its imposing neighbor, or a striving for effect.

Moreover, the advance in the cost of building materials and the advance of household expenses caused by the owning of automobiles have influenced many people to choose a smaller house and an automobile instead of a larger house, in order to level expenses. Of late years, people of all tastes and various incomes occupy contentedly the small house. In fact, it carries with it a lessening of care and an increase in cosiness.

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

THE APPRENTICE AS THE KEYSTONE IN THE ARCH OF INDUSTRIAL EFFICIENCY.

The apprenticeship question has been reopened with renewed vigor and interest in discussions and addresses at recent conventions of the trade. It is evident that plumbing and heating contractors are realizing its vital importance, particularly in the light of the future.

It appears, according to labor statistics, that the industrial efficiency of the American workman will be seriously curtailed and below that of the European mechanic, unless employers recognize the necessity of establishing an effective apprenticeship system, which will guarantee the next generation an adequate output of really skilled mechanics and technically trained men.

In the building trades, for example, the average apprentice has often been considered more of a liability than an asset to his employer, says "Domestic Engineering." Frequently but little interest is manifested in his progress, with the result that he has lost enthusiasm and "pep" and viewed his apprenticeship as merely a job, which he is ready to leave at the prospect of more wages in some other line of activity. Hence there are to-day instances where apprentices have become specialists in the art of driving grocery or laundry wagons or guiding auto trucks through the streets.

Many master plumbers and master steam-fitters have employed apprentices, who have gained, in a haphazard fashion, some of the fundamentals of the trade and have gone into the community as half-baked or botch contractors, entering into competition with the skilled and experienced craft, much to the detriment of the trade.

Both the employer and the apprentice are no doubt at fault in the final analysis. Neither one is giving the other a really square deal, as it were. The employer is prone to feel that he cannot afford to pay an apprentice a substantial living wage, including a part-time trade schooling, nor to take the time to train him in the shop.

The apprentice, on the other hand, is not always willing to make sacrifices in order that he may become a proficient workman and a master of his trade. "Too often," as a veteran of the plumbing trade has said, "he is more keen about making \$18 a week as a helper, than he is of learning the trade."

In an effort to solve the apprenticeship question and to elevate the efficiency of the future mechanic, the Industrial Commission of Wisconsin has taken a step, which may well be emulated by other States. A law has been passed, binding apprentices to their employers for a period of not less than one year and providing for their indenture and their technical education while employed. The provision for the schooling of apprentices in the indenture or contract is as follows:

"The employer shall pay for the time the apprentice is receiving instruction, at the same rate per hour as for services. Attendance at school shall be certified by the teacher in charge, and failure to attend school shall subject the apprentice to a penalty of loss of compensation for three hours for every hour such apprentice shall be absent without good cause."

A penalty of not less than one dollar or more than one hundred dollars is provided for violation of any of the stipulations of the indenture or contract by either employer or apprentice. The amount of compensation, which the apprentice shall receive is subject to agreement in the contract by the parties concerned.

Stewart Schrimshaw, supervisor of apprenticeship in Wisconsin, is working hard to perfect the law, and, with the co-operation of employers of labor, he feels that it will work out satisfactorily and that it will develop a higher type of future mechanic in the State.

THE BUSINESS OUTLOOK FOR 1918 AND AFTER THE WAR.

Commenting on conditions in the plumbing trade, D. H. Bowlzer, sales manager of the Glauber Brass Manufacturing Company, of Cleveland, O., writes as follows:

"It is an established fact that there is less business being done to-day than a year ago or two years ago, and this condition prompts the query that one hears on every hand, 'What's the outlook for 1918 and after the war?'"

"It is always risky to venture a prediction, but it seems a reasonable prophecy that the thoughtful and progressive plumber is going to at least hold his own in 1918—and in many cases exceed previous business and that those plumbers who follow 'the rule of thumb' are going to fall down, and, many of them, down and out.

"Residential and all general building is going to be restricted, as a result of shortage of labor and material and of high prices, but not from lack of general prosperity. The least powerful of these influences is that of high prices, and when labor and material become more plentiful, building will again go ahead by leaps and bounds regardless of prices. The country has the money and is going to have more money, but a man cannot build without labor and material, no matter how much money he has.

"As far as restricted general building is concerned, it is a case of production, and production alone, and no one can question the ability of America to produce the material, once we get adjusted to war conditions. That adjustment is now taking place and will have been completed before 1918 rolls by. This justifies the hope that there will be good general plumbing business before the end of the year, regardless of whether the war ends before or after the end of 1918.

"Meanwhile, the thoughtful, progressive plumbers are going to create a lot of business that did not exist heretofore, and they are going to be doubly careful to make money on every job. Material used must be figured at its value, and full account must be taken of that eternal bugbear, overhead expense.

"The opportunity for creation of business lies in the need of industrial plants for improved sanitary appliances, such as toilets, showers, lavatory equipment and drinking fountains, in the sale and installation of specialties, and in the remodeling of residential plumbing. There is probably no community in which there is not a good chance for profitable endeavor along at least one of these lines. Just a little salesmanship is necessary. Go to the factory people within working distance of your shop and point out the advisability of having those toilets or lavatories or showers or drinking fountains installed now, when plumbers are available; write or call on the owners of residences that have old style plumbing fixtures, and suggest some of the modern and attractive fixtures. There is business for the man who has the energy and ability to go and get it.

"After the war there will come a brief period of readjustment, but it will be very brief, for with the signing of the peace treaty, there will start the biggest commercial race the world ever saw—the race for world business. Manufacturers will all need production far beyond their war or previous peace needs, to fill the export demand from France, Belgium, England, Scandinavia, Russia, South America, the Orient, Africa, etc., for goods of all kinds—business that we heretofore did not go after, and which the lack of boats would have prevented our handling, had we secured it. A good percentage of this foreign money is inevitably going to find its way into building channels.

"Meanwhile, if you are not busy, go out and create some business; make money on every job you do; buy conservatively, but do not let your stock run down, for prices are not due to decline—the general tendency is, rather, to increase, and husband all your resources, to take up future Liberty Bonds and pay war taxes, and to be in shape to secure your share of the big business that will follow on the heels of the cessation of hostilities."

To be poor in a wealthy country, to be sick in a good climate, to be inefficient among a progressive people, is a sign of unwise educational methods. Such people were not taught to battle with the world or meet life's emergencies.—Thoreau.

Don't be discouraged if you make an occasional mistake; if men didn't there wouldn't need to be any claw on a hammer.

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Real Estate Trust Bldg., Phila.
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John B. Rulon.....1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

Chas. H. Robbins.....125 S. 11th st., Phila.
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Philadelphia Mineral Flooring Co.,
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Dampproofing.

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Baird-Osterhout Construction Co.,
1620 Chancellor st., Phila.

Elevators.

A. B. See Electric Elevator Co.,
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Anchor Post Iron Works,
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Fire Doors.

Merchant & Evans Co.,
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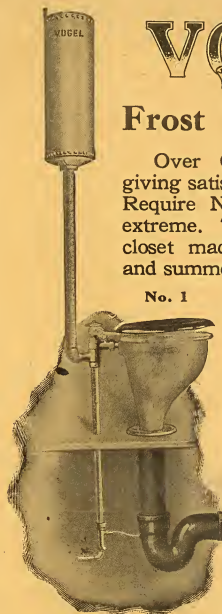
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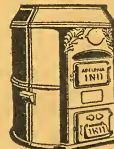
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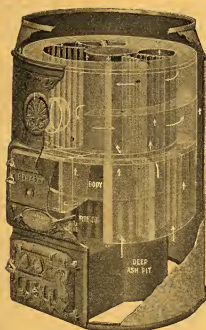
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February 27, 1918

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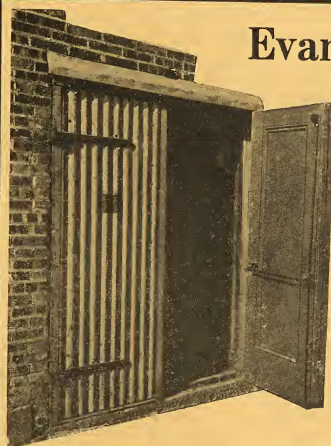
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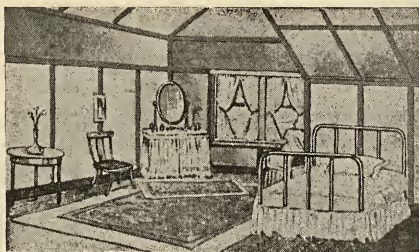
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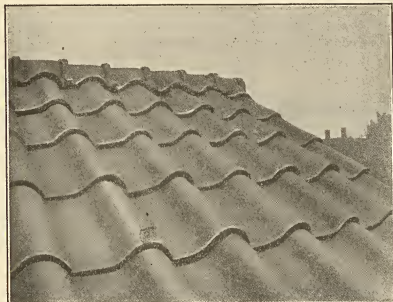
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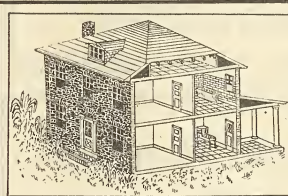


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Devoted to the Advancement of American Architecture, Structural

VOLUME XXXIII

Engineering and the Building Trades

PHILADELPHIA

Number 9

February 27, 1918

BUILDERS' GUIDE

FORMERLY

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and Builders' Guide

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As The Editor Sees It



BY way of showing what New York City is doing, along the line of integrating and co-ordinating the building industry, in order that it may be in a position to act in such emergencies as may arise under war conditions, we are reproducing, on another page, an account of a meeting, held recently in New York, at which officers were elected and a working plan of campaign mapped out for constructive action.

We are indebted to the New York *Real Estate Record* for the very full and complete account given of the various agencies correlating in this movement. What we should like to see is action of a similar sort here in Pennsylvania with some such organization as, say, our Philadelphia Master Builders' Exchange, assuming the initiative.

It will be noticed that in the roster of cities showing interest in the movement there is no mention of Philadelphia. Yet Philadelphia is probably richer in combinations of capital with a direct interest in the building industry than most of the cities named.

We mention the Philadelphia Master Builders' Exchange as the logical body to initiate a movement of the kind, first, because the membership of this splendid organization, representing nearly every branch of the building trades, is of the type to insure the widest interest in such action as might be taken; second, because it is now doing an important and not un-

related work of patriotism in assembling data covering the building trades for government use, and, finally, because, by virtue of its relation to the National Association of Master Builders' Exchanges, it is in a position to play a more or less commanding part in the work of giving the movement a national significance.

The arguments in favor of such a co-ordination of the building industry as is proceeding in New York are so many and so convincing that we can anticipate no difficulty about making plain the importance of the step at this time.

* * *

EVERY other big industry in the country has long ago perceived the necessity for such a centralization as would enable it to meet government regulation, federal war measures, and like expedients, growing out of unusual conditions incident to war necessities, upon an articulate and cohesive basis.

The building industry, alone of all the big industries forming a component part of the material life, has elected to be represented by unrepresentative and narrowly circumscribed individual units.

In the New York association is represented, as a reading of the names of affiliated organizations goes to show, nearly every conceivable agency that has any place in formulating a building, from the architects who do the planning down to the renting agents who find the tenants

after it is completed and ready for occupancy.

Why can't we emulate the New York idea here in Philadelphia, to the end that in the not distant future the great building industry of the country shall be able to speak, when speaking becomes necessary, not in detached units or with conflicting views and aims, but as one vast, compact organization nationally representative, animated by a common purpose and acting with the understanding that is to be had only in careful co-ordination.

We'd like to see some such man of broad and unusual executive ability, as John R. Wiggins or Thomas Armstrong, or O. B. Ketcham, or any one of a half dozen others we could mention, take hold of this movement on behalf of the Exchange and start the wheels to going.

Let it not be said of old Philadelphia, in a period of crisis, and at a time when the need for organization is all too plain to be made the theme for more than passing reference, that she was laggard in her duty and indifferent to her responsibilities to the industry and to the nation.

* * *

THE square foot of floor area and the cubic foot of total volume are the two units in which the costs of buildings are commonly expressed by those who apply rough and ready methods of estimating. But obviously such

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unit costs are subject to wide variations, even in buildings of the same type. Much more satisfactory than the square foot area for approximate cost estimating purposes, says *Engineering and Contracting*, is the square foot of wall, floor and roof, with the basement and foundation estimated separately. Then each type and class of wall, floor and roof can be estimated by itself.

To prepare unit costs for estimating a given type of wall, for example, the estimator first prepares a bill of materials for, say, 100 square feet of wall, and applies unit prices, including labor, to all the materials, totals the items and divides by 100. The same is done for windows and doors, so that, knowing the total area of "openings" the cost is readily estimated.

Preferably the cost of columns is estimated by the linear foot, but, if, desired, the cost of columns may be included as a part of the cost of the floors. Basements may be estimated by the cubic foot, to which may be added the cost of any special foundation work, such as piling, and the cost of the floor. The "equipment"—plumbing, heating, lighting, sprinkler system, elevators, etc.—should be estimated separately; but this, at least in part, may often be estimated by the square foot of floor area. Thus the cost of a factory heating system may be taken at 25 cents per square foot, and the cost of a fire sprinkler system at 20 cents per square foot of floor.

* * *

RECENT experiments made at the Bureau of Standards treating of the use of bricks in various forms in building, give three processes of brick making, discuss the value of bricks for decorative purposes and dwell on their strength, durability and fireproof quality and the ease with which they are laid up into walls, rendering them an exceedingly valuable building material. The announcement, after stating that bricks are made from clays or pulverized shale, gives as the first method of making, that of pressing the soft clay by hand into wooden molds or by means of a machine closely imitating the procedure. This process is called the soft-clay method, because the clay thus molded contains a large percentage of water. The bricks so made are very porous and often cannot be made dense even by hard burning. This, however, does not detract from their durability, as is evidenced by the remarkable weathering of medieval structures.

The second process of brick making consists in forcing the clay in a stiff consistency through the die or opening of a machine resembling very closely the ordinary meat or sausage grinder. This

machine forms a column of clay the width of which corresponds to the length of bricks and the thickness of the width. By means of wires stretched between a frame this column is then cut into bricks. This is the stiff clay process and is especially used in the case of face bricks, since it can be made to produce a characteristic texture and removes the uniform, machine-made appearance which they would otherwise possess.

The third process consists in grinding the raw material to a moist powder and shaping it into the desired form by means of powerful presses. This method is called the dry process. It results in perfectly shaped and finished bricks, which are compact and dense. In spite of their density they remain quite porous unless burned hard, owing to the fact that the structure consists of the separate clay grains, compacted simply by pressure, but still leaving innumerable small pores between the grains.

The use of hollow tiles for walls, either alone or in combination with a brick veneer, is growing rapidly in the favor of the building public. These tiles are being used both for bearing and non-bearing walls. In the case of the latter, represented principally by partition walls, hollow bricks also are frequently employed. For the former purpose none but hard-burned tile can be considered, while soft material is well suited for partitions.

* * *

BUT while the Bureau of Standards has been experimenting in the making of bricks and their use in home building, it has also taken up the question of wood, which it very rightly calls one of the chief materials used in the construction and furnishing of the home. Wood has had natural advantages because of the ease with which it is worked and fastened, because it has strength and hardness for general purposes, because it is comparatively light, because it is good protection against heat and cold, and because it is pleasing in appearance. These properties, which are due to its peculiar chemical nature and physical structure, have made wood unique among building materials.

An impression seems to be prevalent that the supply of wood is becoming so depleted that in the near future it can be used only for ornamental or special purposes. This is declared to be erroneous. We still have enough virgin timber, it is declared, in this country to last for several generations, and with the growing practice of forestry a certain supply will always be maintained, partly by increasing the yield of timber per acre and partly by checking the waste in using the timber.

THIS emphasis on the adaptability of brick, intended to relieve the situation brought about by the scarcity of structural steel, recalls the article written by Cass Gilbert, some months ago, on the adaptability of mason construction. Said Mr. Gilbert:

"We have been perhaps extravagant in America in the use of structural steel for building work. There are hundreds of buildings erected in this country every year which could be just as well erected without steel, and in hundreds of others the amount of steel could be greatly reduced. An enormous tonnage could be saved if reinforced concrete, masonry, or other material was used. Practically all buildings of moderate height can be erected without the use of large quantities of structural steel. Reinforced concrete or old-fashioned masonry can take its place, and for a time at least we could well forego the erection of buildings of excessive height. The architects and engineers of America have ingenuity enough to meet our building problems along these lines if they must, and if the owners of prospective buildings will adapt their views a little to the practical conditions of masonry and concrete there is no reason why we should not in the end have even better and more substantial buildings for all structures of moderate height.

Our architecture will not suffer for lack of steel, and if it did we can wait to remedy that. The greatest architecture the world has ever known was built of masonry and concrete. Vast spaces were vaulted, vaster, perhaps, than any we now build, and far more enduring. The Baths of Caracalla and of Diocletian, the Pantheon in Rome, the Dome of St. Peter's in Rome, the Mosque of Santa Sophia in Constantinople, all spanning great distances, were built of masonry. The great cathedrals in France and England were vaulted with masonry. Certainly no more dignified and imposing buildings were ever built. The floor construction of the earlier buildings in our own country, such as the old section of the Treasury Department and the older portion of the National Capitol, was vaulted masonry. In Italy and France, in our own time, it has been the custom to construct floors of concrete or masonry vaulting, and should we return to these methods of construction we would develop an architecture more substantial and more imposing than anything that we can construct of steel.

The use of the timber arch construction, as in the Boston Public Library, the Hall of Fame of New York University, the Cathedral of St. John the Divine of New York, the Capitol Building at St.

Paul, and the elliptical "rotunda of the United States Custom House in New York, are examples of what can be done in wide-span construction, practically without the use of steel, the dimensions of the last-named vault being 86 feet in its minor axis and 126 feet in its major axis. A great number of other examples of recent constructions, such as loft buildings, office buildings, warehouses, and factories from five to ten stories in height, have been erected entirely in con-

crete in various parts of the United States, and show that Americans can build and build well without structural steel. Viaducts, bridges across broad rivers, and culverts almost without number, have been built in this country practically without steel. The great bridge of the Great Northern Railroad across the Mississippi at Minneapolis, that of the Pennsylvania Railroad at Harrisburg, the viaducts in the Borough of Queens, all of concrete or masonry."

countered in obtaining raw materials. Although there is but a small demand from the contracting interests, the business coming from the manufacturing consumers is quite satisfactory.

The Portland cement market is quiet at the present time, but there is a fair prospect for a satisfactory spring business. The cement interests are looking forward to an increased use of their material in the construction of roads, bridges, culverts and the general construction of manufacturing and industrial plants. Cement prices are firm at the \$2.15 level for orders of one thousand barrels, or more. There has been some discussion in reference to increasing the price of this commodity, but as yet nothing definite has been announced. If any change in price is effected it will not include the net figure at mill base, but will increase the local wholesale price. The increase will be necessary to cover the greatly increased cost of bags.

WHAT IS DOING IN THE BUILDING TRADES

The Philadelphia Chamber of Commerce, at a meeting of its Board of Directors, adopted the following resolution on the death of Mr. J. A. McKee, vice-president of the Merchant-Evans Company:

"It is with sincere regret that this Board must give official expression of its sorrow for the death of Mr. J. A. McKee, who for many years has been an active member of this body. Mr. McKee possessed the personality that drew men to him; he had a broad grasp on the business problems of the day; he was an active business man and patriotic citizen. During his span of life he won the respect and esteem of all his associates. It is therefore resolved, that this Board expresses to his family its deep sympathy in this time of their bereavement, and that a minute of this action be spread upon the records of the organization as an expression of our deep regret at the loss of our fellow member."

During the week the plans were filed with the New York City Bureau of Buildings for a twenty-one story hotel to be erected at the northwest corner of Seventh avenue and Fifty-sixth street, on the site now occupied by the Hotel Grenoble. The plot to be improved measures 100x200 feet. The plans for this structure have been prepared by Lawrence L. Barnard, 46 Lawton street, New Rochelle, N. Y., for Joseph J. Lannin, owner and proprietor. This hotel will cost approximately \$4,000,000 to build and equip. It will contain about one thousand rooms and will be designed and erected according to the latest ideas of hotel planning and construction. The project will be named the Hotel Marne, in commemoration of the great battle of that name in the present World War. Although the plans for this operation have been worked out, it is not expected that active construction will be started for quite some time.

The annual meeting of the Empire Brick and Supply Co. was held on February 13, at its principal office at Stockport, N. Y., at which the following directors were re-elected for a term of two years: Robert W. Main, Arthur S. Main, and William H. Edsall. The officers of the company are: President, Wright D.

Goss; vice-president, Robert Main; treasurer, William H. Edsall; secretary and assistant treasurer, Robert W. Main. The New York offices of the company are at 103 Park avenue.

H. Craig Severance, architect, 4 West Thirty-seventh street, Manhattan, has recently returned from Northern France, where he has been investigating housing conditions in some of the villages.

C. J. Andrus, who for the past seven years has been general manager of the Western furnace department of the Michigan Stove Co., has accepted a similar position with the V. A. Smith Co., Chicago. The company has planned to extend both its manufacturing and its selling operations. Mr. Andrus will have three new lines of furnaces completed by April 1 embodying several distinctive features in furnace construction. A one-register furnace is also to be made.

Announcement is made by Meurer Bros. Co., Brooklyn, manufacturers and dealer in tin plate, sheet iron and metals that its business in the future will be conducted as Meurer Bros. Co., Inc. The change is in the name only, as the old organization and personnel remain in all respects unchanged. The officers are as follows: President, Jacob Meurer; vice-president and general manager, C. H. Bolles, Jr.; secretary and treasurer, Andrew Meurer.

J. K. Mohler, Ephrata, Pa., is desirous of receiving from furnace manufacturers catalogues and literature of both their pipeless and pipe furnaces with discounts and price lists.

The American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building New York City.

Prominent manufacturers of mixed paints and enamels have recently advanced their prices for their products owing to the increased cost of production and the difficulties en-

To all intents and purposes the window glass situation is unchanged. Manufacturers are hindered by a number of factors over which they have no control. The railroad congestion and embargoes prevent receiving of raw materials and the shipment of finished product. According to estimates recently announced the total production for the current blast will be approximately 4,000,000 boxes as compared with 11,000,000 boxes last year. The total consumption of last year was more than 7,000,000 boxes, but as building has materially slowed down there is no danger of a shortage even at the greatly lowered scale of production for this year. There has been no change in the schedule of discounts.

The Philadelphia Chamber of Commerce has called the attention of Pennsylvania Senators and Representatives to a bill now pending in the English Parliament which provides that if the proprietor of a word trade-mark so uses his mark as to lead the public to regard it as the name of an article, it shall be removed from the register of trade-marks. The Chamber of Commerce has been requested to use its influence to the end that a protest may be registered against the introduction of any such bill in Congress as the one now pending in England.

As a result of a conference between the journeymen and the Committee of the Employers' Association of Roofers and Sheet Metal Workers of New York City, the wages of journeymen until June 30, 1919, are to be \$5.60 per day of 8 hours and \$5.80 from that date until December 31, 1920.

The New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the management of Louis W. Buckley. The floor space to be occupied equals 100,000 square feet.

That there is actually greater activity in the building trades is best indicated by the

growing number of contracts being awarded and the volume and character of the operations that are being presented to the builders and material dealers for estimates. Prospective builders are to-day more generally inclined to award contracts for their contemplated work than they have been for many months. The offices of the architects in this city are busier than they recently have been. These signs all point to renewed life in building and construction circles and unless these signs fail absolutely the spring and summer months should be active times for the structural interests.

The National Association of Builders' Exchanges of the United States, at its recent meeting in Pittsburgh, Pa., decided to hold the 1919 convention at Milwaukee, Wis. Charles Elmer Smith, former secretary of the Philadelphia Master Builders' Exchange, is now secretary, by appointment of President John R. Wiggins, of the National Association. Mr. Smith's office is at 34 South Seventh street, Philadelphia.

There is a decided improvement in the speculative building field and a number of important operations are now being planned for both city and suburban locations. The speculative revival was no doubt brought about by the acknowledged scarcity of rentable space, both residential and commercial. The recent activity of the housing boards and committees has been another influencing factor that partially accounts for the awakened interest of the speculative builders. A heavy demand continues to exist for living accommodations in the city and suburbs, and although there is quite a large number of buildings of an investment or speculative nature now under construction or contemplated for an early start, the total will be insufficient to fully take care of the demand, and additional structures will have to be erected during the spring and summer or there will be a repetition of the scarcity that existed last autumn.

Fire causes are difficult to separate fully and clearly. Thus, the \$12,724,317 of loss from defective chimneys and flues and the \$7,355,047 from sparks on roofs, are closely associated. Both of them call special attention to the shingle roof hazard, which is also so large a factor in nearly every conflagration. This hazard is present in inexcusable degree in every part of the country, but in the south-eastern section of the United States it is especially marked. For example, not long ago, a representative of the National Board spent a day in the fire headquarters of a Southern city of 35,000 people, and took account of the nature of the alarms which came in while he was present. Out of a total of sixteen, one proved to be a false alarm, but the other fifteen were for genuine fires, of which fourteen were shingle roof fires. In this section, the use of low grade shingles is extensive. Such shingles swiftly deteriorate when exposed to the weather, and give a ready lodging place to sparks, which fact, in view of the large

use of wood for fuel, makes this danger excessive in many of the Southern States.

The markets for building materials have also felt the force of the improved general conditions. There is a better atmosphere, and orders and inquiries have been somewhat more frequent, but as yet it is too early for the material dealers to experience the full measure of the improvement and it will require some time for the markets to respond. Owing to the more moderate weather materials have moved with somewhat greater facility both by rail and water and as the crisis in the fuel situation is passed the manufacturers are relieved of considerable anxiety on this score.

The annual election of the Philadelphia Chamber of Commerce resulted in the election of the following officers: President, Ernest T. Trigg, vice-president of John Lucas & Co., Inc.; vice-presidents, Alba B. Johnson, A. C. McGowin, Charles P. Vaughan, H. K. Mulford, Powell Evans, president of the Merchants-Evans Company; secretary, N. B. Kelly; treasurer, Richard L. Austin; directors: Charles S. Calwell, Samuel M. Curwen, Wil-

liam O. Hempstead, Walter P. Miller, S. K. Muford, Fayette R. Plumb, Thomas Shalcross, Jr., Joseph M. Steele, president of William Steele & Sons Co.; Ernest T. Trigg and Chas. P. Vaughan.

The new Disston double duty saw is for use in general construction work of all kinds, studding up houses, shoring for sewers, making forms for concrete building, railroad work, millwright, farm use, and in fact for all general purposes. To be perfectly sure of its adaptability for the particular work in question, sample saws were made and distributed among carpenters on concrete construction work. These practical trials and tests demonstrated beyond doubt the practical utility of this style of saw and its advantages on the classes of work mentioned over the regular patterns, each of the carpenters using the saw highly commending it and expressing a desire to purchase one. The tooth-edge consists of a special combination of rip and crosscut teeth, each section separated by a deep gullet. Those who have used this saw pronounce it the best and most practical saw they ever used for the purpose.

POINTERS FOR THE WIDE AWAKE DEALER

["The Dutch Boy Painter" is a clever little house organ, issued by the National Lead Company. One of its features is "Store Talks"—snappy suggestions upon making the store look attractive to the buyer. While these talks were meant for paint dealers they are quite as adaptable to the dealer in building material and supplies as they are to the paint-man. Read them. You'll find them well worth the time spent in their perusal.]

Tell Folks Your Store News.

Store News is anything you want your customers to know about your gds.

It may be a special sale, or a new line you want people to try, or a change in prices, or something about staple goods, nationally advertised.

Prepare a board about 24x30, with a soft wood back, and post up with thumb tacks any printed advertising that tells people what you sell.

And use snappy, hand-lettered cards, something different every day.

The first cost—a dollar or two—is the whole cost, and you can make the board talk to every customer who comes to your store.

A Traveling Advertisement.

Has it occurred to you that your auto trucks or wagons can be made to advertise your business without any extra expense?

A well painted vehicle is always a good advertisement, but if your trucks carry around with them some snappy message delivered with a punch, you are getting the benefit of a busy salesman who talks to people's eyes and draws no salary.

Paint up your trucks in good shape—get up

some attractive signs, brief and to the point, mount them on your trucks and change them from time to time—it will help people remember you and your business.

Mailing List Time.

If you have not a mailing list don't go without one. It is one of the biggest helps you can have in building up a business.

The list should be kept in a card file (3x5 cards) which can be purchased at any stationery store for a small sum.

Put only one name and address on a card so that changes can be made easily.

To get the full benefit of a mailing list it must be complete and kept up to date.

It takes but a little time to do this and the results are sure to justify the effort.

When you want to send out advertising matter, as should be done several times a year, the cards will give you a complete line of prospects.

Small Jobs Start Big Ones.

"Great trees from little acorns grow." Old stuff, you say.

But have you ever thought about applying that to business?

One painter we recently heard about makes every effort to get the small job. He says that five times out of ten, when he is hired to paint a fence, he paints the house, too, before he gets through.

Isn't that true of things other than paint? The fellow who came in last fall for a sack of cement is building a concrete silo this spring and the order is yours. Little things lead to big.

PHILADELPHIA MASTER BUILDERS' EXCHANGE COLLECTING BUILDING DATA FOR USE OF U. S. GOVERNMENT

The appended communication, which is being sent out to material men in every branch of the building trades, is self-explanatory:

The Master Builders' Exchange is compiling for use of the U. S. Government, all possible data in reference to the building trades. We have also offered the use of our building, the personal service of any member of the War Emergency Committee and the index and information which the Exchange is now gathering.

All information of a private character will positively be confidential and will be used only for the guidance of the U. S. Government. If information is furnished, your name and address will be placed in the index file of the Exchange for use now and in the future; as this file is to be a permanent fixture of the Exchange. You will appreciate that you will be performing a patriotic duty and it will prove beneficial to you to have your name thus listed. We shall be glad to have a copy of your catalogue or other literature for fil-

ing in our library, for use of architects and engineers, as well as for information of the Government.

It is absolutely essential that all co-operate with this Committee and forward at once all information which would be of use to the Government, its Committees, or to the subsidiary companies.

1. What articles do you handle? Name all important.
2. In how great quantities could you furnish?
3. In how short time?
4. From factory or warehouse?
5. Where is it located?
6. Trade names of specialties?
7. Name and address of local representative?
8. Additional information which would be valuable, in accordance with this letter.

WAR EMERGENCY COMMITTEE,
Master Builders' Exchange,
18 to 24 South Seventh street, Philadelphia.

Water Fitters' Association of New York, Employing Stone Setters' Association, Tile, Grate and Mantel Association, Association of Wire Work Manufacturers of the City of New York, and the Manufacturing Wood Workers' Association.

Also included in the membership are the following organizations: Building Material Exchange, Brooklyn Chapter American Institute of Architects, New York Chapter American Institute of Architects, New York Society of Architects, Real Estate Board of New York, Credit Association of Building Trades, Chamber of Commerce of Queens, National Plate Glass Association and the National Lime Manufacturers' Association.

Following the movement started several months ago in New York City to co-ordinate the building industry, the Middle West has become active, and in many districts several similar campaigns along constructive lines have been inaugurated and progress made.

The Chamber of Commerce of Chicago has undertaken a detailed survey, with a view to co-operating in a national movement. Several years ago this city had a building boom, and an overbuilt condition resulted. The city has not yet entirely recovered from this condition.

St. Louis has been active. Some time ago the Chamber of Commerce started an industrial survey, which included, in a general way, a building survey. At the present time the city needs warehouses and workmen's homes, and to less extent houses of other description. The Association of Commerce of Milwaukee is going to undertake a general survey of conditions in that city. From surface indications there is no startling need for new construction, and there seems to be plenty of housing for the workman.

Kansas City is oppressed with labor troubles, and is suffering from the same conditions which have restricted building in other municipalities. There is a negro problem to face. The city is in urgent need of labor of this class, but difficulty is being found in obtaining it on account of the cost of living accommodations. There is in progress of completion a survey of housing conditions.

So far as Omaha is concerned there is a normal demand for buildings of practically every class. The Commercial Club is making a survey of the city. In Akron and Youngstown, Ohio, there has been a shortage of housing for several years, and from present indications it seems that a considerable period will elapse before conditions again reach normal.

The Builders' and Traders' Exchange of Cincinnati has become interested in the movement, and has taken steps to have a survey made. There is a comparatively small building force in this city, and if a fair amount of work was awarded there would be no idle labor in the building field. Cleveland has need for buildings of practically every kind. The Builders' Exchange has the matter in charge, and steps are being taken to relieve the situation.

(Continued on page 141.)

BUILDING INDUSTRIES OF NEW YORK ELECTS OFFICERS AND DIRECTORS

Recently there was held a first election of officers of Building Industries of New York at the rooms of the Building Trades Employers' Association. Hugh Getty, president of the Building Trades Employers' Association, was elected president; Ernest R. Ackerman, president of the Lawrence Cement Company; Laurence McGuire, president of the United States Realty and Improvement Company, and president of the Real Estate Board of New York, and Franklin T. Miller, president of the F. W. Dodge Company, publisher of the "Record and Guide," were elected vice-presidents; G. Osgood Andrews, representative of the Plate Glass Manufacturers of America, treasurer, and Allen E. Beals, of the Allen E. Beals Corporation, secretary.

The following directors were also elected: H. H. Murdock, of Jardine, Hill & Murdock, architects, chairman of the Board of Directors; Charles J. Kelly, Ronald Taylor and Max Baumann, all members of the Building Trades Employers' Association; Elliott Smith, president of the Building Material Exchange; C. J. Curtin, National Lime Manufacturers' Association; Frank H. Quinby, of the Brooklyn Chapter, American Institute of Architects; C. A. Jackson, New York Chapter, American Institute of Architects; Frederick C. Zobel, New York Society of Architects, and Edward A. MacDougall, president of the Queensboro Corporation.

The following associations are members of

Building Industries of New York: Building Trades Employers' Association, composed of the following thirty-three associations: Employers' Association of Architectural Iron Workers, Master Carpenters' Association, Master Carpenters' Association, Local No. 1; Master League of Cement Workers, Composition Roofers and Waterproofers Employers' Association, Greater New York Cut Stone Contractors' Association, Electrical Contractors' Association, Elevator Manufacturers' Association, New York League of Heat and Cold Insulation, the Hoisting Association, House Movers' and Shorers' Association, Association of Investing Builders in the City of New York, the Iron League Erectors' Association, the Lighting Fixture Association, Marble Industry Employers' Association, Mason Builders' Association, Mason Contractors' Association, Metal Ceiling Association of New York, Association of Manufacturers of Metal Covered Doors and Windows, Employing Metallic Purring and Lathing Association of New York, Mosaic Employers' Association, Ornamental Bronze and Iron Masters' Association, Association of Master Painters and Decorators of the City of New York, the Parquet Flooring Association, Employing Plasterers' Association, Associated Plumbers' Association of the City of New York, Refrigerator Manufacturers' Association, Employers' Association of Roofers and Sheet Metal Workers of Greater New York and Adjacent Cities, Master Steam and Hot

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Boat Shop (add.) and Building No. 10 (extension). Spec. No. 2806, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel, concrete and terra cotta, 2 stories, 120x59 feet, and 1 story, 101x340 feet, slate and composition roof, steam heating, electric lighting, marble work, rolled steel sash fire doors, fire escapes, cement floors. Lowest bid submitted by Thos. Reilly, 1616 Thompson street, Philadelphia; second lowest bid submitted by Warren-Moore Co., Colonial Trust Building, Philadelphia.

Garage, Fifth street above Girard avenue, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner, name withheld. Brick, steel and concrete, 2 stories, 75x190 feet, composition roof, cement floors, electric lighting, steam heating, gasoline storage system, reserved. Plans completed. Architect will be ready for bids in a few days.

Elevated Stations (4), Frankford Elevated, Philadelphia. Architects, Dept. of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Dept. of City Transit, Bourse Building. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, tile, marble and terrazzo work, rolled steel sash and skylight, hollow metal sash and doors, etc. Owners taking bids, due March 12th. Ketcham & McQuade, 1023 Brown street, and Roydhouse-Arey Co., 112 North Broad street, Standard Const. Co., 1713 Sansom street, W. W. Antine & Co., 1218 Filbert street; F. W. Van Loon, Denckla Building, James Connor, 1317 Arch street, Philadelphia, Quantity Survey Co., 21 West Forty-fifth street, and Connors Bros. Co., 64 West Eighty-eighth street, both of New York City, figuring.

Power House and Boiler Room, 2626-56 Martha street, Philadelphia. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owners, L. M. Leberman Sons, Inc., on premises. Brick and concrete, 1 story, 26½x58½ feet, slag roof, concrete foundation, electric lighting, cement floor. Architects have received bids.

Residence, Upsal street, Germantown, Philadelphia. Architect, Laurence Visscher Boyd, Harrison Building, Philadelphia. Owner, John A. Seeds, Upsal and West Wissahickon avenue, Germantown. Stone, 3 stories, 40x64 feet, stone foundations, slate roof, hot water heating, electric lighting, tile and marble work, pine floors. Architect taking bids, due March 4th. F. B. Davis, 240 North Sixteenth street; Wm. J. Gruhier & Co., 219 East High street;

Wm. C. Wright, 22 Harvey street; Chas. Johnson, 5700 Boyer street, and Pringle Borthwick, 8x18 Germantown avenue, are figuring.

Warehouse, 1112 Race street, Philadelphia. Architect, I. W. Levin, 434 South Eighth street, Philadelphia. Owner, Harry Silverman, 1110 Race street, Philadelphia. Brick, 2 stories, 20x75 feet, slag roof, cement and plank floors, steam heating, electric lighting, masonry, structural steel. Owner is sub-letting all contracts.

Garage and Club House 5632 Ridge avenue, Roxborough, Philadelphia. Architect, Frank V. Nickels, 4400 Manayunk avenue, Manayunk. Owner, Reuben Kenworthy, on premises. Cut stone, 2½ stories, 40x78 feet, slate roof, maple and cement floors, metal lath, hot water heating, electric lighting, waterproofing, gasoline storage system. Architect has secured bids.

Garage, American and Clarkson streets, Philadelphia. \$6,000. Architect, private plans. Owner, J. T. Clasby, 4353 North Ninth street, Philadelphia. Stone, 1 story, 45x130 feet, slag roof, cement floors. Owner is ready to start work.

Residence (alts. and add.), 1608 North Front street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Lydia Kligerman, on premises. Brick and marble front, hot air heating, electric lighting, new stairways, yellow pine floors. Architect ready for bids.

Store Building (alts. and add.), 50 South Sixteenth street, Philadelphia. Architect, private plans. Owner, M. Drucker, on premises. Consists of renovation of entire property, 2 stories; addition, 2 stories, brick, slag roof, parquet floors, electric lighting, hot water heating, tile and marble work, skylights, flush bulks. Owner taking bids, due March 8th. Stacy Reeves & Sons, 2011 Market street, are figuring.

Store and Dwelling (alts.), 1804 East Allegheny avenue. Architect, E. Allen Wilson, 3 Chestnut street, Philadelphia. Owners, Polis Co., 1805 East Allegheny avenue, Philadelphia. Brick, 2 stories, hot air heating, electric lighting, plastering,

painting, cement work. Owner is taking bids.

Machine Shop (add.), Salmon and Tioga streets, Philadelphia. \$3,000. Architect, private plans. Owner, Quaker City Iron Works, Richmond and Tioga streets. Brick, 1 story, 59x67 feet, slag roof, cement floors, rolled steel. Owner is ready to start work.

Engine House (13 stalls) Tulip street, South of Somerset street. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owner, Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia. Reinforced concrete and brick, 1 and 2 stories, 200 feet, J-M roof, concrete and asphalt and mastic floors, electric lighting, rolled steel sash, fire and hollow metal doors, hollow tile, waterproofing, ornamental iron work, wire work. Owners taking bids, due March 7th. Roydhouse-Arey Co., 112 North Broad street; H. E. Baton, 1713 Sansom street; F. W. Van Loon, Denckla Building, and P. A. Havens Co., 845 North Nineteenth street, are figuring.

School, Fifty-fourth and Lansdowne avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick, stone and reinforced concrete, 3 stories and basement, 95x36 feet, composition roof, cement floors, electric lighting, hollow metal sash, fire and hollow metal doors, ornamental iron work, metal lath, roof ventilators, wire work. Owners taking bids, due March 7th at noon. Mitchell Bros., 2125 Race street; Wm. R. Dougherty, 1610 Sansom street, and the Standard Const. Co., 1713 Sansom street, are figuring.

School Building (alts.), Pine and Quince streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Consists of changing present building into Trade School for girls. Plans about completed. Will take bids in a few days.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Office Building (add.), Snyder avenue and Swanson street. \$8,600. Architect, H. P. Friend, Boyer Arcade, Norristown, Pa. Owner, General Manufacturing Co., on

premises. Brick, 2 stories, 25x44 feet, slag roof, maple floors, metal lath. Contract awarded to H. P. Friend, Boyer Arcade, Norristown, Pa.

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GASOLINE, BRINE,
ETC., ETC.

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Foundation Walls to
Interior Trim."

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AWARDING A CONTRACT

Warehouse, 514-16-18 Randolph street, Philadelphia, \$10,000. Architect, private plans. Owner, H. Perlstein, 515 South Sixth street, Philadelphia. Brick, 2 stories and basement, 46x80 feet, slag roof, cement and maple floors, steam heating, electric lighting, elevators, rolled steel skylights, fire doors. Contract awarded to Samuel Rosenberg, 612 Norris street, Philadelphia.

Stable (alts.), Garage, Pump and Toilet Room, Clinton and Westmoreland streets, Philadelphia, \$6,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passayunk avenue, Philadelphia. Consists of interior alterations, steam heating, electric lighting, cement floors, metal lath. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Store House, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care Chief C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete and brick, 6 stories, 180x200 feet, asphalt and composition roof, concrete and maple floors, steam heat, electric light, rolled steel sash, hollow metal and fire doors, hollow tile, elevators, safety treads, ornamental iron work. Contract awarded to Cramp & Co., Denckla Building, \$454,000.

Laboratory and Office, Navy Yard, League Island, Philadelphia, \$249,500. Architect, private plans. Owners, U. S. Government, care Chief C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete and brick, 3 stories, 180x124 feet, slag roof, cement and maple floors, steam heat, electric light, plumbing, res. marble and terrazzo work, rolled steel sash, metal lath, hollow tile, elevators, ornamental iron work. Contract awarded Turner Concrete Steel Co., 1713 Sansom street, Philadelphia.

Store (alt. and add.), 38 South Fifty-second street, Philadelphia. Architect, Henry L. Reinhold, Jr., 1309 Walnut street, Philadelphia. Owners, Louis and Julius

SEWAGE PROBLEMS

If you have water or sewage problems to solve in connection with a new residence, country place, farm or institutional building, bring them to us. We plan, design and install every type of private utilities.

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Winkelman, on premises. Consists of interior alterations, metal bulks, hardwood floors. Contract awarded to Basch & Co., 1426 South Front street, Philadelphia.

Stores and Apartments (int. alt.), Green Lane and Ridge avenue, \$10,000. Architects, Heacock & Hokanson, 1218 Chestnut street, Philadelphia. Owner, Roxborough Trust Co., on premises. Consists of alterations, mill work, slate roof, steam heat, tile and marble work. Contract awarded to Wm. H. Eddleman & Son, 453 Green Lane, Roxborough.

Residence, Thirty-second and Coulter streets, Philadelphia, \$8,000. Architect, private plans. Owner, Moses Brown, West School Lane, Germantown, Philadelphia. Stone, 3 stories, 21x52 feet, shingle roof, hot air heating. Contract awarded to M. S. Oberholtzer, 5524 Pulaski avenue, Germantown.

Garage, Orianna and Callowhill streets, Philadelphia, \$8,200. Architect, private plans. Owner, Philip C. Ganett, 409 Chestnut street, Philadelphia. Brick, 1 story, 51x78 feet, slag roof, stone foundations, cement floor, electric lighting. Contract awarded to J. D. Fisher, 5424 Thompson street, Philadelphia.

Assembly Shop, Navy Yard, League Island, Philadelphia, \$839,557. Architect, private plans. Owner, U. S. Government, care Chief C. W. Parks, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete and brick, 1 story, 198x 630 feet, and 400x344 feet, asphalt and composition roof, concrete and maple floors, steam heat, electric light, rolled steel sash, hollow tile, safety treads, ornamental iron work. Contract awarded to McCloskey & Bahls, 1620 Thompson street, Philadelphia.

PENNSYLVANIA Construction News

Silk Mill (alts. and add.), Williamsport, Pa. Architects, Stearns, Woodnutt & Schmoht, Stephen Girard Building, Philadelphia. Owners, Demarest Silk Co., Williamsport, Pa. Brick, 3 stories, general interior alterations to present building, cement floor; addition, brick, 3 stories, 40x50 feet, slag roof, plank-maple finish floors, electric lighting, rolled steel sash and skylights, fire doors, fire tower, waterproofing (steam heating and 100 H. P. Boilers, separate bids). Architects taking bids, due

February 27th. Samuel Larrivee, Williamsport, Pa.; Wm. Kun, Williamsport, Pa., and the Shamokin Lumber & Mfg. Co., Shamokin, Pa., are figuring.

Farm House (alts. and add.), Richboro, Pa. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, Edgar A. Gillinder, Tacony and Devereaux streets, Tacony. Frame and stucco, 2½ stories, 20x50 feet, tin roof, yellow pine floors, electric lighting, plumbing. John F. Davies, 1021 Herbert street, Frankford, Phil-

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adelpia, is taking sub-bids.

Office Building, Marcus Hook, Pa. Architect, W. G. Eckles, New Castle, Pa. Owner, Sun Oil Co., Marcus Hook, Pa. Brick, steel and terra cotta, 2 stories and basement, 47x35 feet, slag roof, cement and terrazzo floors, steam heating, electric lighting, marble and terrazzo work, hollow metal sash and skylights, fire doors and hollow metal doors, hollow tile, metal lath, safety treads, roof ventilators, waterproofing, dampproofing, ornamental iron work. Owners taking bids, due as soon as possible. Barclay White Co., 1713 Sansom street, Wark-Yardley Co., 1737 Filbert street, Philadelphia, Flounders Bros., Media, Pa., and A. S. Reed & Bro., 815 snipley street, Wilmington, Del., are figuring.

Manufacturing Building, Front street, Chester, Pa. Architect, private plans. Owners, Penn Seaboard Steel Corp., Franklin Bank Building, Philadelphia. Steel and brick, 1 story, 55x380 feet, Metropolitan roof, rolled steel sash and skylights, waterproofing, cement work. Owner will build.

Stores and Apartments (4), Third street, Chester, Pa. Architect, Maurice R. Dillon, 8-1 Crozier Building, Chester, Pa. Owner, Frank I. Barrett, 801 Crozier Building, Chester, Pa. Brick, 2 stories, 20x50 feet, slag roof, pine floors, steam heating, elec-

tric lighting, flush bulks. Plans completed. Owner will build.

House and Tower and Out Building, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care W. A. Young, 427 P. O. Building, Philadelphia. Brick, 2½ stories, 24x32 feet, and 1 story 18x22 feet, concrete and slate roofs, concrete and pine floors, iron stairs, limestone trim; tower, 12x12 feet. Owners taking bids, due March 14th. Wark-Yardley Co., 1737 Filbert street, Philadelphia, are figuring in addition to those previously reported.

Hotel, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, George Shober, 305 Market street, Chester, Pa. Stone foundations, brick, terra cotta and concrete, 4 stories, 70x80 feet, slag roof, steam heating, combination lighting, tile work, hollow metal skylights, fire tower and fire doors, yellow pine floors, metal lath, trunk lift, roof ventilators, ornamental iron work. Architect taking bids, due March 9th. Hogg Const. Co., 1634 Sansom street, Philadelphia, and Chester Const. Co., and R. H. Scroggins & Sons, both of Chester, Pa., are figuring.

Infirmary Building "S" and Tunnel to "K" Building, Spring City, Chester Co., Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institution for Feeble Minded Women of Eastern Penna., Spring City, Pa. Brick, stone and steel, 2 stories, 181x20 feet and 80x40 feet, tunnel-225 feet long, slate and slag roof, granolithic floors, steam heating, electric lighting, hollow tile, metal lath, elevators, metal weatherstrips, dampproofing, wire work, marble and terrazzo work, hollow metal and rolled steel sash skylights, fire doors, iron stairs, ornamental iron work. Owners taking bids, due March 6th. Ketcham & McQuade, 1029 Brown street, Wm. H. Jones, West Chester, Pa., Wm. H. Wiand, Pottstown, Pa., Pringle Northwick, 8018 Germantown avenue, Philadelphia, are figuring.

Club House (alt.), York, Pa. Architect, Ed. Leber, York, Pa. Owner, Lafayette Club, York, Pa. Brick, general interior alterations to 4th floor, plastering, mill work, plumbing fixtures, tile and marble work. Plans in progress.

Residence, Parkesburg, Pa. Architect, Henry Y. Shaub, Lancaster, Pa. Owner, Chester Frankhauser, Parkesburg, Pa. Hollow tile and stucco, 2½ stories, 26x35 feet, slate or asbestos shingle roof, hot water heating, electric lighting, pine floors. Plans in progress.

Store (alt. and add.), North George street, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owner, Walter

Smutz, York, Pa. Brick, 2 stories, 22x41 feet, slag roof, pine floors, steam heating, electric lighting, tile and marble work, flush bulks. Plans in progress.

Residence (alt.), East Market street, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owner, Miss Elizabeth Herr, York, Pa. Brick, 3 stories, 25x190 feet, mill work, plumbing fixtures, electric lighting, tile work. Plans in progress.

Lodge Building, York, Pa. Architect, G. Frank Witman, City Bank Building, York, Pa. Owner, Knights of Malta, care Architect. Brick, 2 stories and basement, 113x41 feet, composition roof, maple floors, steam heating, electric lighting, tile and marble work, fire escapes, roof ventilators. Plans in progress. Architect will take sub-bids April 1st.

Auto Repair Shop, Franklin street, York, Pa. Architect, G. Frank Witman, City Bank Building, York, Pa. Owner, Harry Wiest, Franklin street, York, Pa. Brick, 1 story, 56x50 feet, composition roof, concrete floors, electric lighting. Plans in progress.

Garage, Pottsville, Pa. Architects, Schermerhorn & Phillips, 430 Walnut street, Philadelphia. Owner, W. L. Kramer, Pottsville, Pa. Hollow tile, 1 story, 22x30 feet, shingle roof, cement floors, electric lighting. Owner is taking bids.

Power Plant and Cottages (3), Indian Creek and B. & O. R. R., Fayette County, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, Mountain Water Supply Co., Commercial Trust Building, Philadelphia. Reinforced concrete, hollow tile and stucco, 1 story and basement, 31x71 feet and 12x56 feet. Cottages, frame, clapboard and shingle, 2½ stories and basement, 26x30 feet and 33x28 feet, slate roofs, cement and pine floors, hot water heating, electric lighting, plumbing, rolled steel sash, metal lath, hollow tile. Architects taking bids, due March 4th. Corrected list of bidders is as follows: Jacob Myers & Sons Co., Witherspoon Building; H. H. Wehmeyer, 1004 West Lehigh avenue; Rust Eng. Co., Pennsylvania Building; Pomeroy Const. Co., 1609 Ranstead street, all of Philadelphia, and Nola Building Co., and the Duquesne Const. Co., both of Pittsburgh, Pa. Garage and Service Station, West Chestnut street, Lancaster, Pa. Architects, Estop & Shaub, Lancaster, Pa. Owner, Mrs. Caroline H. Steinman, care of architects. Brick, 2 stories, 60x80 feet, slag roof steam heating, electric lighting, hollow metal sash, fire doors, concrete floors. Plans about completed. Architects will take bids in one week.

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PENNSYLVANIA

Contracts Awarded

Residence (atls.), Frazer, Pa. Architects, Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owner, Thos. L. Fansler, Bullitt Building, Philadelphia. Stone, 2½ stories, shingle roof, plumbing, electric lighting. Contract awarded to Wm. H. Parلمان, Devon, Pa.

Post Office (Remodeling), Pittsburgh, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Consists of general interior and exterior alterations and addition. Contract awarded to Wills-Englehof Co., 101 Park avenue, New York City.

Warehouses (3), Middletown, Pa. \$900,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Brick and frame, slag roof, electric lighting. Contract awarded to James Black Masonry & Const. Co., St. Louis, Mo.

Manufacturing Buildings, Allentown, Pa. Architect, private plans. Owners, International Motor Co., Allentown, Pa. Brick, concrete and steel, 1 story, 100x500 feet, composition roof, concrete floors, rolled steel sash and skylights. Contract awarded to Austin Co., Cleveland, Ohio.

Office Building, South Prince and Hager streets, Lancaster, Pa. Architect, Henry Y. Shaub, Lancaster, Pa. Owners, Lancaster Iron Works, Lancaster, Pa. Brick, 2 stories, 40x80 feet slag roof, concrete floors, steam heating, electric lighting. Contract awarded to Joseph P. Breneman Lancaster, Pa.

Store (alts.), West Market street, York, Pa. Architect, John A. Dempwolf, Cassatt Building, York, Pa. Owner, Julius Schaeffer, West Market street, York, Pa. Consists of new store front, flush bulk. Contract awarded to Samuel Glattfelter, York, Pa.

lights, 110 feet high. Contract awarded to J. S. Rogers Co., Moorestown, N. J.

Hospital Buildings, Camp Dix, Wrightstown, N. J., \$500,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Frame, steam heating, electric lighting, Ready roofing. Details undecided—cost plus percentage job. Contract awarded to John W. Ferguson Co., Paterson, N. J.

Solarium, Wrightstown, N. J., \$30,000. Architect, Mantle Fielding, 28 West Walnut Lane, Germantown. Owners, American Red Cross Society, Camp Dix, Wrightstown, N. J. Frame, 1 story, 72x66 feet, 20x30 feet and 2 porches, 13x66 feet, Ready roof, steam heating, electric lighting. Contract awarded to J. S. Rogers Co. Moorestown, N. J.

Delaware

Construction News

Store Building (add.), 806-808 King street, Wilmington, Del. \$15,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, H. Feinberg, on premises. Brick, 2 stories, 40x80 feet, slag roof, pine floors, metal lath, rolled steel sash and skylights, metal ceilings, steam heating and electric lighting, extensions. Plans in progress.

Residence and Garage (alt. and add.), Wilmington, Del. Architect, E. C. May, duPont Building, Wilmington, Del. Owner, C. M. Banks, Ninth and Harrison streets, Wilmington, Del. Brick and stone, 2 stories, consists of general interior alterations, tin roof, concrete and hardwood floors, electric lighting; garage, 20x34 feet. Architect has received bids.

Apartments (add.), Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, name withheld. Brick, 3 stories (6 family), slag roof, pine floors, electric lighting. Plans in progress.

Residence (add.), Marshallton, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, M. Henderer, Wilmington, Del. Frame, 2 stories, 4 room addition, shingle roof, pine floors, electric lighting. Architect has received bids.

Bank (alts.), Wilmington, Del. Architects, Brown & Whiteside, duPont Building, Wilmington, Del. Owner, Wilmington Trust Co., Wilmington, Del. Consists of general interior alterations, bronze work, tile and marble work. Contract awarded to Philadelphia Art Metal Works Co., 323 Vine street, Philadelphia.

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NEW JERSEY

Construction News

Power House (add.), Camden, N. J. Architect, private plans. Owner, New York Shipbuilding Co., Camden, N. J. Brick, steel and concrete, addition 118x109 feet, 35 feet high. Owners will sub-let all contracts.

Residence (alts.), Riverton, N. J. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, McIvaine Biddle, Riverton, N. J. Consists of general interior and exterior alterations. Architect taking bids, due March 2nd. Geo. W. Shaner, Palmyra, N. J.; Louis F. Loudon, Palmyra, N. J., and Smith & Staveland, Riverton, N. J., are figuring.

Apartment (alt. and add.), Walnut street, Trenton, N. J. Architects, Fowler & Seaman, Broad street Bank Building, Trenton, N. J. Owners, Petry Express Co., Trenton, N. J. Brick, 3 stories, 30x60 feet, plumbing, hot water heating, electric lighting. Low bidder, Joseph Barlow, Trenton.

Pier, Trenton, N. J. Architect, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owner, City of Trenton, care Eng. Dept., City Hall, Trenton, N. J. Concrete, steel and corrugated iron, 1 story, 189x50 feet and 85x50 feet, L-shaped, reinforced concrete roof. Lowest bidder, Newton A. K. Buggbee, Trenton, N. J.

Residence, Charleston, N. J. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, Earl Blyer, Charleston, N. J.

Frame and plaster, 2½ stories, 25x30 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Architect taking revised bids, due March 2nd. Joseph E. Kolster, Beverly, N. J., and Hugh B. Miller, Edgewater Park, N. J., are figuring.

Residence, Woodside and Reading avenues, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, Melville Cline, Trenton, N. J. Brick and frame, 2½ stories, 30x40 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Plans in progress.

State Hospital (add.), Trenton, N. J., \$90,000. Architect, P. H. Bent, State Capitol, Trenton, N. J. Owners, State Hospital Board of Managers, Trenton, N. J. Brick, 2 and 3 stories, dining hall and sleeping quarters. Sketches being prepared.

School (alt.), Lambertville, N. J. Architect, Wm. A. Kleeman, Trenton, N. J. Owners, Lambertville School Board, Walter P. Hayhurst, District Clerk, Lambertville, N. J. Consists of new toilet facilities. Plans in progress.

New Jersey

Contracts Awarded

Roof Covering, Camden, N. J. (Destroyers Ways). \$70,000. Architect, private plans. Owner, New York Shipbuilding Co., Camden, N. J. Frame, millwork, sky-

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PHILADELPHIA

MARYLAND Construction News

Canning Plant, Carey and Warner streets, Baltimore, Md. Architects, Owens & Sisco, Continental Building, Baltimore. Owners, C. G. Summers Co., 415 West Camden street, Baltimore. Brick and steel or reinforced concrete, 2 stories, 100x300 feet. Plans in progress. To early for details.

Mill and Warehouse, Oella, Md. Architect, private plans. Owners, W. J. Dickey & Sons, Inc., Oella, Md. Brick and mill construction. Plans in progress. Too early for details.

Church, Charles and Thirty-sixth streets,

Baltimore, Md. Owners, University Baptist Church, Willoughby M. McCormick, chairman Building Committee, Pratt and Concord streets, Baltimore, Md. Church building to cost approximately \$140,000; Sunday School to cost \$35,000. Competitive plans will be received until March 1st.

Monument, Lafayette Memorial, Mt. Vernon Place and St. Paul street, Baltimore, Md. Architect, Thomas Hastings, 225 Fifth avenue, New York City. Owners, City of Baltimore, City Hall, Baltimore, Md. Plans in progress. Details not decided.

MARYLAND Contracts Awarded

Buildings, Aberdeen, Cecil Co., Md. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Consists of 48 buildings, concrete, steel and hollow tile, fireproof, to be used as gas-filling plant. Contract awarded to Mellen-Stewart Co., Munsey Building, Washington, D. C.

Building, northwest corner Columbia avenue and Putnam street, Baltimore, \$5,000. Architects, Parker, Thomas & Rice, Baltimore, Md. Owners, Bartlett-Hayward Co., Baltimore, Md. Brick, concrete and steel, 1 story, 28x50 feet, slag roof, electric lighting. Contract awarded to Morrow Bros., Fidelity Building, Baltimore.

Residences (8), Greenmount avenue, near Breton Place, Baltimore. Architect, private plans. Owner, H. Webster Cook, 210 Law Building, Baltimore. Brick, 2 and 3 stories, 24x40 feet, tin roofs, hot water or hot air heating, electric lighting. Owner will sub-let.

Garage, west side of Oak street, near Twen-

ty-third street, Baltimore, Md., \$6,000. Architect, private plans. Owners Emerson & Morgan Coal Co., 20 St. Paul street, Baltimore. Brick, 1 story, 35x135 feet, slag roof, cement floor, electric lighting. Contract awarded to J. T. Townsend, 4832 Pimlico road, Baltimore.

Store and Apartment, Charles street and Lafayette avenue, Baltimore, Md. Architects, Mottu & White, 324 North Charles street, Baltimore. Owner, O. B. Pyle, Sr., 111 West Twenty-ninth street, Baltimore, Md. Brick, 3 stories, 30x65 feet, stone trim, concrete work, slag roof, metal lath, tile and marble work, electric lighting, flush bulks. Contract awarded to C. E. Stubbs, Equitable Building, Baltimore, Md.

Warehouse, 701 Luzern street, Baltimore, Md., \$8,000. Architect, private plans. Owners, Samuel Robinson Co., 607 South Luzerne street, Baltimore. Brick, 3 stories, 45x75 feet, slag roof, electric lighting, steam heating, plank and cement floors. Contract awarded to

L. Schoenlein & Son, 2217 East Baltimore street, Baltimore, Md.

Miscellaneous Construction News

School, Plainfield, Mass. Architects, Mellor, Meigs & Howe, 205 South Juniper street, Philadelphia. Owners, Moses Hallock Memorial School, Plainfield, Mass. Frame, 2 stories, 72x30 feet and 30x30 feet, slate roof, hot air heating. Builders, R. C. Ballinger & Co., 218 N. Thirteenth street, Philadelphia, are taking sub-bids.

Proposals

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 20, 1918.—Sealed proposals will be opened in this office at 3 P. M., April 3, 1918, for the construction of the United States assay office at New York, N. Y. The work includes deep foundations, safety vaults, and certain mechanical equipment. Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 21, 1918.—Sealed proposals will be opened in this office at 3 P. M., April 3, 1918, for the construction of entrances for three safety vaults and furnishing certain vault lining and infusible metal alloy shapes for the United States assay office at New York, N. Y. Drawings and specifications may be obtained from the supervising chief engineer, room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Alterations and Additions

Dwelling, 8104 St. Martin's Lane, \$670. H. N. Taylor (O), as above. John J. Walt (C), 204 East Willow Grove avenue. Install toilet room, first floor.

Storage Building, 1826-28 South Eleventh street, \$7,000. B. Swartz (O and C), 1519 North Seventh street. Fire repairs, new roof and floor.

Storage and Milling, Richmond and Tioga streets, \$1,000. Girard Smelting and Refining Co. (O), as above. J. G. T. Miller (C), 2315 West Clearfield street. Brick, 1 story, 14x32 feet, slag roof.

Garage, Twenty-second and Arch streets,

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\$9,000. Edw. Harris (O and C), 2214 Chestnut street. Fire repairs.

Store and Dwelling, 602 East Allegheny avenue, \$415. Harry Yavil (O), 600 East Lippincott street. N. Litman (C), 2030 South Fifth street. New bulk window.

Bank, 103 Leverington street, \$1,000. Manayunk National Bank (O), Main and Leverington streets. Elmer Culbertson (C), 334 Roxborough avenue. Interior alterations.

Garage, Trenton and Westmoreland streets. Atlantic Refining Co. (O), 3744 Passayunk avenue, Metzger & Fisher (C), Otis Building. Alterations.

Store and Dwelling, 2505 South Broad street, \$725. Raif Lauria (O), as above. Tony Fiorella (C), 321 North Sixty-fifth street. New bulk and alterations.

Store and Dwelling, 262 South Fifth street, \$300. Louis E. Wiser (O and C), 260 South Fifth street. Alterations.

c Wag-on vShed, 621 North Fifty-fourth street, \$400. Bertille E. Krauthen (O), 610 North Fifty-third street. O. A. Krauthen (C), 610 North Fifty-third street. Brick, 1 story, 17x170 feet, walls, open shed.

Garage, 4545 Lancaster avenue, \$600. I. Rosznwicz (O), 1442 Callowhill street. C. M. Swartley (C), 6835 Ridge avenue. New flush bulk and interior alterations.

Store and Dwelling, 1120 Glenwood avenue, \$500. J. Harry Jacoby (O and C), as above. Remove bulks and new front.

Store and Dwelling, 2828 Kensington avenue, \$700. Joseph Iredale (O), as above. John W. Mortimer (C), 3024 E street. Brick, 2 story, 12x16 feet, slag roof.

Garage, Fifty-fifth and Walnut streets, \$450. J. F. Stewart (O and C), as above. Change bulk window.

Shop and Dwelling, 2237 Grays Ferry Road, \$2,000. Frank Avellino (O), as above. Jackson Dunlap (C), 138 North Fifty-second street. New bulk and alterations.

Dwelling, City avenue, East of Fifty-ninth street, \$15,000. C. P. Vaughan (O), Overbrook. Alfred James (C), Bala, Pa. Alterations, interior, cement and plaster.

Office, Snyder avenue and Swanson streets, \$8,600. General Mfg. Co. (O), as above. Henry P. Friend, Inc. (C). Brick, 2 story addition, 25x44 feet, slag roof.

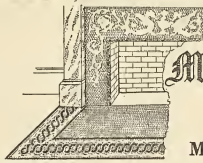
Store, 1224 Market street, \$885. John Wanamaker (O), Philadelphia. Basch & Co. (C), 1420-36 South Front street. Flush bulk.

Store and Dwelling, 938 North Second street, \$300. Reliable B. & L. Asso. (O), 1017 North Front street. Wm. McDowell (C), 2457 North Thirty-first street. Alterations.

Store and Dwelling, 801 South Second street, \$900. Peter Butkowski (O), as above. Angelo Codano (C), 2026 South Eighth street. Brick, third story rear addition, 20x18 feet. Flush bulk windows.

Inspecting Department, York and Cedar streets, \$925. City of Phila. (O), City Hall. Girard Elevator Co. (C), 125-27 North Seventh street. A skeleton frame to install and erect elevator.

Factory, Thirteenth and Wood streets, \$2,500. Mrs. Heid (O), 4615 Chestnut street. E. J. Kreitzburg (C), 1345 Arch street. Alterations.



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Fence, Schiller and Richmond streets, \$500. Girard Smelting and Refining Co. (O and C), as above. Stone wall, 75 feet long.

Store, 2840 Kensington avenue, \$650. B. Pollock (O), as above. M. Wolf (C), 1829 South Fourth street. Brick, 2 story addition, 13x13 feet, slag roof.

Office and Warehouse, 617 Arch street, \$1,500. Chas Bond Co. (O and C), 520

Arch street. Alterations.

Shed, Womrath and Tackawanna streets, \$1,100. Tomallino Silk Dyeing Co. (O), as above. John Fotheringham (C), 3317 Frankford avenue. Alteration to roof and new doorway.

Dwelling, 1713 North Fifty-second street, \$1,500. A. H. Allen (O), 1121 Liberty Building. John McShain (C), 1610 North street. Interior alterations.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Storage Building, 138-142 East Allen street, \$15,000. Gorgas Pierie Co. (O), 126 East Allen street. Turner Concrete Steel Co. (C), 1713 Sansom street. Reinforced concrete and brick, 2 story and basement, 58x75 feet, felt roof.

Foundations, (12, Rittner and Swanson streets, \$1,200. Chas. E. Johnson & Co. (O), 509 South Tenth street. Franklin Eng. & Con. Co. (C), 408 Bulletin Building. Concrete foundations for tanks 28 feet diameter, 18 inches thick.

Warehouse, 514-16-18 Randolph street, \$10,000. H. Perlstein (O), 515 South Sixth street. Sam. Rosenberg (C), 612 Norris street. Brick, 2 story and basement, 46x80 feet, slag-roof, steam heating.

Garage, American and Clarkson streets, \$6,000. J. T. Clasby (O and C), 4353 North Ninth street. Stone, 1 story, 45x130 feet, slag roof.

Lunch Room, Twenty-first and Johnston streets, \$400. A. Brown (O), 1855 Gladstone street. Wm. H. McArdle & Son (C), 511 Bainbridge street. Corrugated iron and steel, 1 story, 10x40 feet.

Dwelling, 3273 New Kirk street, \$2,000. Morris L. Miller (O and C), 12 2 Commonwealth Building. Brick, 2 story, 14x36 feet, slag roof, hot water heating.

Store and Dwelling, 3339 Almond street,

\$3,300. F. Pezzillo (O and C), 3347 Almond street. Stone, 2 story, 14x36 feet, slag roof, hot air heating.

Garage, Westmoreland and Tilton streets, \$3,800. F. Pezzillo (O and C), 3345 Almond street. Brick, 1 story, 14x69 feet, slag roof; front building, 2 story, 14x14 feet, stone foundation, cement floors.

Garage, Moore and Bambrey streets, \$20,000. Chas. Shetzline (O), 2021 South Broad street. H. F. Dinkelacker (C), 227 North Farnson street. Brick, 1 story, 55x200 feet, slag roof.

Sand Storage, Berks and Beach streets, \$3,000. De Frain Sand Co. (O and C), as above. Six (6) bridges, 60-inch span each.

Garage and Residence, 1143 Sprague street, \$1,800. A. S. Tourison (O and C), 7014 Boyer street. Stone, 1 story, 20x20 feet, slag roof and alterations.

BUILDING INDUSTRIES OF NEW YORK ELECTS OFFICERS AND DIRECTORS.

(Continued from page 135.)

Buffalo is another city suffering from the lack of workmen's houses, chiefly in the Elmwood industrial section. A committee has been appointed to look into the question and see what remedy can be found. Another city

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

interested in the movement is Pittsburgh, though at the present time practically every line of endeavor is actively engaged in supplying the Government with its requirements. There is a need for housing of the cheaper grade, and the Chamber of Commerce has this matter in charge. It is anxious to do whatever lies in its power to federalize the building industry.

As in New York City, the principal drawback throughout the country is the difficulty of obtaining money. Banking interests are taking the stand that material prices will recede, though there is every indication that they will go considerably higher before any

recession occurs, and even then it is most doubtful whether the prices will be at a lower level than at present.

The principal cities throughout the Middle West and East are ripe for, and willing to join, a movement which will federalize the building industry so that it will be a power which can be wielded for the benefit of the Government when occasion arises. There are many problems now facing the Government which would find easy solution were the building industry co-ordinated. It is only a logical step, and once it is thoroughly appreciated the Government will be the first to insist upon the industry being unified.

wages for funds with which to pay for his home, cannot safely borrow on a short time mortgage which he knows he will not be able to liquidate during the term of the loan, and as it may fall due in a time of tight money and depressed business conditions, he fears he may not be able to renew it at maturity.

"What is needed to finance a home building program in any community is a financial institution, especially organized and operated to make long time loans, repayable in small, periodical payments, about the same as rent. There is just one type of financial institution which is adapted to fill this need, and that is what is known as a Building and Loan Association. These are called in New York, Savings and Loan Associations; in Massachusetts, Co-operative Banks; in Louisiana, Homestead Associations. What is a Building Association? It is a financial democracy. For some time past, we have heard a great deal about democracy, and the importance of preserving democratic ideals for the nations of the earth. A democracy is an organization in which each of the members have equal rights, powers, privileges and opportunities. A Building Association is a practical example, the concrete expression of the idea of democracy, applied to a financial institution. A Building Association is a mutual co-operative company, chartered by the State, and composed of members who associate themselves together for their mutual benefit and financial advantage. The saving members use the association as a place where they pay in from time to time the sums of money, either great or small, which they are able to save from their wages, or income. The borrowing members use the association as a place where they borrow money for use in buying, building or improving their home, repaying their loan in small periodical payments, usually by the week or month. The aim and purpose of a Building Association is to encourage thrift by the saving of small sums, and to provide ways and means by which every family may procure a home. The members save money together, lend money to each other, divide the profits with each other, work together to help each other. Each association is a local, independent institution, with no financial connection with any other. Each member has a voice and vote in the selection of its officers and directors and in fixing its plan of operation.

"In whatever light these institutions are viewed, whether as ethical institutions, refining, upbuilding and elevating the personal characters of their members; whether as patriotic institutions, transforming transient, wandering tenants into permanent home-owning, home-loving, patriotic citizens, or as practical business institutions, engaged in mobilizing the savings of the people, and applying them to the creation of community wealth and the upbuilding of the nation—from every point of view their work and mission is fraught with infinite possibilities for good."

BETTER BUILDING AND THE BUILDING AND LOAN ASSOCIATION GO HAND IN HAND AND ARE MUTUALLY CO-OPERATIVE

Pittsburgh, Pa., February 14, 1918.—"The first Building Association in America was organized in Philadelphia in 1831, and the idea has spread to every State of the Union," said K. V. Haymaker, of Detroit, speaking to-day upon the subject of "Home Building and Citizenship" at the annual meeting of the Retail Lumber Dealers' Association of Pennsylvania. "These Associations now number more than 7,000 with a membership of more than 3,500,000 and with total assets of more than \$1,698,000,000, and these assets are growing more than \$114,000,000 per year. The value of these Associations is so well understood, and the benefits which they confer are so well known, that the laws of every State favor and encourage their organization. In many of the States they are under State supervision and inspection, and wherever they operate they have done marvels of good in teaching habits of thrift, which build up and strengthen character in building homes which add to the wealth of the community, and in stimulating and increasing the volume of business in every line.

"The desire to own a home is one of the natural, primal instincts of every man. The gratifying of this deep seated desire to own a home, and the toil and sacrifice and self-denial by which it is won, refines and elevates and ennobles men; it inspires in them a self-respect and inspires in others a respect for them that makes them better men and better citizens, better husbands and fathers; gives them a standing and position in the community as freeholders that can never be attained by mere renters. The broadest minded and most far seeing men in all lines of big business realize that business efficiency demands and must have the service of men and women of the highest, or at least of the normal physical and mental fitness, to do the work and transact the business of the country. Not only are the employers of labor awake to the

vital necessity of proper housing conditions for our people, but all the powerful elements in our civic life are arrayed together in a concerted movement which will eliminate the unfit housing and slum conditions that exist in our larger cities and in many of our manufacturing and mining communities. When you get the moral and educational elements, the civic and political factors, the commercial and business influences and the labor organizations all working together to bring about this much needed reform, you may be certain that the desired result will be achieved."

"This movement to stimulate home building is not confined to the large cities. In the smaller towns and villages, and in the rural districts the need for more and better homes is very great. In most farming communities, better and pleasanter homes would be most helpful in arresting the unfortunate tendency of the boys and girls to leave the farm and seek a career in the city, and would do much to stimulate the supply of farm products, for which there is such great and growing need. There should not only be better homes on our American farms, but also better barns and granaries and other farm buildings, for lack of which a vast amount of food products are wasted every year, and a much larger quantity are injured in quality and reduced in value.

"As we contemplate this big campaign of home building, the question arises, 'How will it be financed?' Few prospective home builders have sufficient funds to pay cash for their homes, and they must in large part be paid for with borrowed money. Banks cannot finance this movement, since the making of mortgage loans is only a small side line of their regular business. A bank cannot safely tie up any considerable portion of its assets in long time loans, and in every State the law limits the power of banks to make long time loans. On the other hand, the average working man, depending on his savings from his

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

PRODUCTION OF LIME DURING 1917; SHOWING DECREASES AND INCREASES BY STATES

The estimated production of lime made and sold in 1917 in the United States, including Porto Rico and Hawaii, was 3,663,818 short tons, a decrease of ten per cent. compared with the revised total for the record year, 1916, which was 4,073,433 short tons. It surpassed, however, all records, previous to 1916. This estimate is based on returns made by the principal producers to G. F. Loughlin, of the United States Geological Survey, Department of the Interior.

Of the forty-two producing States only eleven reported increased sales. Virginia and Indiana were the only States in the group having sales of more than 100,000 tons to show increase, which amounted to one per cent. and three per cent., respectively. Other States of this group showed decreases ranging from five per cent. (Pennsylvania) to thirty-six per cent. (Wisconsin). Vermont, with an output of 53,143 tons, showed an increase of twenty-three per cent.

The estimated sales of hydrated lime in 1917 amounted to 719,757 short tons, a slight gain (2,375 tons, or 0.3 per cent.) over the sales shown by the revised figures for 1916. This difference is so small that the final figures may not show a gain. This is the first year since statistics of hydrated lime have been collected by the Survey in which there has been no substantial gain in its production. The fact that hydrated lime held its own, however, during a year in which the decrease in the production of lime was so general indicates a relative increase in its use. No companies reporting sales of hydrated lime in 1916 failed to report sales in 1917, and two new hydrating plants reported production, one in Arkansas and one in Idaho. The largest percentages of decrease in the production of hydrated lime were made in States whose product is used largely for building.

The prices of lime, which generally increased in 1916, continued to rise throughout the country in 1917, though not in proportion to the continued increase in cost of production. A few companies in widely separated parts of the country were obliged to close their plants, partly on account of excessive costs but particularly because of shortage in fuel and labor. These conditions and a shortage of railway cars caused decreased production even where the demand for lime was reported good.

The building lime trade declined in all parts of the country. The unprecedented demand for building lime in 1916 continued until February, 1917, when the effects of the war, augmented in some northern districts by severe weather, brought it to a close. A fair to good demand continued in many districts, however, through the spring, and then a general decline in building set in. This decline

was due to the uncertainties of war, to increased shortage of labor, fuel, and cars, and to the fact that lime being perishable, the trade would not order large car lots as demanded by the railroads.

In the Middle Atlantic States (New York, Pennsylvania, New Jersey, and Maryland) the estimated total production of lime in 1917 was fourteen per cent. less than in 1916, but that of hydrated lime increased nearly eight per cent. Prices were almost uniformly reported higher, a few producers reporting increases of twenty-five or thirty-four per cent. Costs showed greater increases, however, one producer reporting an increase of thirty per cent. in selling price but an increase of 150 per cent. in costs. Shortage of labor, fuel, and cars also curtailed output, and, together with high cost of operating, forced some plants to remain idle during the greater part of the year.

In these States the building lime trade was prevailingly dull. Although a few producers reported that the demand was the same or slightly improved in 1917 compared with 1916, most of them reported marked decline, ranging from ten to fifty per cent. in Pennsylvania, and even to seventy-five per cent. in New York and New Jersey.

In the New England States the estimated total production of lime in 1917 showed a decrease of seventeen per cent.

AMERICAN HARDWARE WINS IN SOUTH AMERICA.

British Journal Publishes Digest of Strides Made in Venezuela.

Philadelphia, as a great hardware manufacturing city, has a direct interest in the admission, published in the "Hardware Trade Journal" of London, that American goods are making substantial gains on the north coast of South America. The article is based on the report of an old-established hardware merchant in Caracas, forwarded through the British vice consul in that city. In substance he says:

American files have proved as good as the British articles and are cheaper and with better cuts. They are also of more acceptable shapes.

Carpenters' tools with wooden parts, such as smoothing planes, jack planes, etc., were formerly imported from the United Kingdom; later they were ousted by German articles, and now the American products hold the field.

There is a tendency on the part of American firms to capture gradually the South American markets for screws with nuts. Iron and copper screws were formerly im-

ported from France, later from Germany, and at present they are being imported from the United States.

British instruments and tools still retain their reputation for quality, but there are a few items, such as bits and braces, the quality of which is not so good as that of American articles.

British padlocks are dear and, above all, heavy, and German and American padlocks have almost entirely replaced them. Moreover, the British shapes lack variety. Germany and the United States produce many varieties, and in various types, as regards both the padlocks and the keys. The South American people like variety in such goods.

As regards pipes and connections of black or galvanized iron, also galvanized iron sheets, either plain or corrugated, and similar products, the Americans have been making headway and bid fair to retain a portion of the increased trade they have secured during the war.

Nearly all wire nails and tacks and staples were formerly imported from Germany, but later came from the United States.

MOST ARCHITECTS CALLED INCOMPETENT BY WITNESS.

Charles McDermott, inspector of buildings for the State Department of Education at the inquiry started by the Assembly Committee on Education at Trenton, N. J., declared that seventy-five per cent. of the architects of the State are incompetent.

The probe is being conducted to learn why employees of the State Educational Department are not following more strictly the statutes which require them to visit school buildings.

Mr. McDermott explained that he devoted much time to the examining of plans for new buildings, making recommendations and then seeing that they were carried out. Assemblyman Gill, of Mercer, pointed out to him that he was simply an "inspector of buildings" and was not called upon for that duty under the law.

Dr. Calvin N. Kendall, Commissioner of Education, will be summoned to appear before the committee.

OCEAN CITY TO REGULATE PUBLIC GARAGE BUILDINGS.

Claiming that the conduct of a public garage business in a building not properly constructed with suitable materials and upon architectural and engineering principles is dangerous to public health, safety to human life and property, the City Commissioners of Ocean City have passed on first reading an ordinance, introduced by

Mayor Champion, regulating public garages.

It is required that the enclosing walls shall be at least twelve inches thick and be of fireproof material.

The ordinance is not intended to abrogate private rights that individuals, firms; etc., may have as to private personal or property right, nor is the ordinance to apply when written consent is obtained of land owners within 100 feet of any public garage. When such consent is obtained, the improvements must comply with the building ordinance.

CARPENTERS COUNCIL ELECTS STATE OFFICERS.

At the State Council of the United Brotherhood of Carpenters and Joiners at Bethlehem, Pa., the following officers were elected:

President, D. A. Post, Wilkes-Barre.

First vice-president, W. T. Allen, Philadelphia; second, A. M. Swartz, Pittsburgh; third, W. W. Werner, Reading; fourth, George A. Wuenschel, Erie; fifth, Robert M. Williams, Wilkes-Barre; sixth, John S. Bair, York; seventh, Charles A. Harvey, Scranton.

Secretary-treasurer, James A. Ryan, Philadelphia.

Williamsport was unanimously chosen for next year's convention place. A resolution was passed extending to President Wilson the State Council's high appreciation of his efforts and the spirit of fairness shown by his commission toward labor.

COMPANIES BUILD HOMES TO ATTRACT LABOR.

The Lehigh Coal and Navigation Company have started construction on six detached and four semi-detached concrete dwellings at Lansford, Pa., for their employees, at a cost of \$35,000. The Philadelphia and Reading and the Delaware, Lackawanna and Western are also in list of home builders. The Lehigh and Wilkes-Barre Coal Company has also completed two concrete foundation villages at Lee Park and Laramie, near Wilkes-Barre, at a cost of \$200,000. The village of Underwood has been built by the Pennsylvania Coal Company on the Erie road, near Scranton, with model living conditions. The Weston-Dodson Company have built a village near Shonandoah of similar quality and conveniences for the mine workers. It is said that other operating companies will soon follow building homes at various other points in the anthracite region.

It is the intention to make the anthracite region attractive for the worker in an effort to raise the anthracite army to its original normal output figures of 177,000 men. The

welfare work done by the operators for their men has been the means of bringing 1,100 men back to the mines since December, the working forces now numbering 153,000 men.

RELATIVE VALUE OF COMPETITION AND CO-OPERATION—SOME OF THE ADVANTAGES OF ORGANIZATION.

The relative values of competition and co-operation were well illustrated in the remarks made by Otto E. Class at the recent banquet of sheet metal men in St. Louis. His presentation of this subject, which is given in the following, indicates that a great deal more can be accomplished working together than in competition.

If it is competition, you can easily create more of it, if you believe you need it.

If it is co-operation, you must contribute your share of co-operation through your associations.

There are certain facts about your business you cannot obtain as individuals. For instance: What was the amount of business done in this city in 1917 in furnace installation, fire doors, metal windows, sheet metal work on new buildings and sheet metal repairs on old buildings? This is a matter of statistics, to be compiled by the association. Provided you contributed your share, it would be of great value for you to know.

What was the percentage of gross profits, on this work?

What was the percentage of overhead cost?

What was the percentage of net profit?

What was the percentage of work done at actual loss?

What per cent. is the estimating cost, to the contract price of all parties bidding on a certain job?

You know there are some jobs where the estimating cost of all parties figuring on the job, is more than the labor cost.

Why not pool this cost and make the customer a present of it? It would be better business policy than our present method; we would be making money by this plan.

Are you entitled to be paid for the expenses incurred by estimating on a job you do not get? If you believe you are, what are you going to do to remedy this unfair feature in the present method of conducting your business?

These questions, and others of equal importance, cannot be solved by any individual; they are work for your association. Your associations are only equal to the task of doing such work as directed by the individual members and to be effective we must have the co-operation of every sheet metal contractor in the city.

Think this over. If you believe the competitive way is the proper way to conduct your business, continue as you have in the past. If you believe co-operation will help

you in your business, join us in our association work for mutual benefit. You will find the latch-string of our association door hanging on the outside at all times, ready to admit you to our deliberations.

GREEK INFLUENCE ON ARCHITECTURE

In a recent lecture at Boston on "Modern Architecture as Traced from Ancient Greece and Rome," Prof. Frank Chouteau Brown, of Boston University, said that the style of architecture carried out so prodigiously by the Romans has not found half the favor among present day designers, on account of its pompousness and impressive grandeur that the simpler and more expressive scheme so peculiar to the Greeks has won.

The latter, especially during the period of the Renaissance, developed a grace and refinement of detail that have been copied by the best architects in every period the whole world over. It took many centuries for the old Greek masters to be fully appreciated, he said. The Italians were probably the first to see the possibilities. Later the French took up the idea from the Italians.

Even later, the English began to draw the old Greek styles from both Italy and France, and then America, after turning seriously to the study and development of architecture, naturally imitated to a large extent the styles of London and other equally beautiful cities.

The three orders or styles figuring most prominently in Greek architecture at the present day can be found in any large city in this country, he said.

Prof. Brown took occasion to refer to the Parthenon on the Acropolis of Athens, the temple in honor of the goddess of Athena, widely known as the most beautiful and richly decorated of the many temples of Greece. Phidias, the greatest sculptor who ever lived, superintended the mammoth undertaking, the accomplishment of which commemorated the deliverance of the Athenians from the Persians.

Coming nearer home, Prof. Brown described the simple wooden, two-story Colonial mansion of Count Rumford, of Woburn, as a meritorious example of early Roman architecture. Bishop Athorp's old residence in Cambridge and the Vernon House at Newport, R. I., were other types used by him as examples of the old Roman methods.

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.

Don't be discouraged if you make an occasional mistake; if men didn't there wouldn't need to be any claw on a hammer.

Reference Directory for Architects, Builders and Owners

Artesian Wells.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Ridpath & Potter Co.Bourse Bldg., Phila.
John B. Rulon.1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

Chas. H. Robbins.125 S. 11th st., Phila.
Warren-Knight Co.136 N. 12th st., Phila.
F. Weber & Co.1125 Chestnut st., Phila.

Blue Prints.

Chas. H. Robbins.125 S. 11th st., Phila.
F. Weber & Co.1125 Chestnut st., Phila.

Blue Print Paper.

Chas. H. Robbins.125 S. 11th st., Phila.

Brick (Face, Etc.).

O. W. Ketcham.Builders' Exchange, Phila.

Brick Renovating.

Adolph Christensen.1433 Brown st., Phila.

Builders.

Graham-Campion Co.Otis Bldg., Phila.
Hogg Construction Co., Inc.,
1634 Sansom st., Phila.
Mitchell Bros.2125 Race st., Phila.
Pomeroy Const. Co.1609 Banstead st., Phila.

Builders' Supplies.

P. H. Fairlamb Co.115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.

Cement.

P. H. Fairlamb Co.115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.
Lehigh Portland Cement Co.Penna. Bldg., Phila.

Columns (Metal).

Pearce Fireproof Co.1345 Arch st., Phila.

Composition Flooring.

Philadelphia Mineral Flooring Co.,
5633 Summer st., Phila.

Woodoleum Manufacturing Co.,
203 Liberty Bldg., Phila.

Dampproofing.

The Barrett Co.New York City and Phila.

Drawing Materials.

Charles H. Robbins.125 S. 11th st., Phila.
F. Weber & Co.1125 Chestnut st., Phila.

Electrical Construction.

Baird-Osterhout Construction Co.,
1620 Chancellor st., Phila.

Elevators.

A. B. See Electric Elevator Co.,
Colonial Trust Bldg., Phila.

Engineers' Supplies.

Charles H. Robbins.125 S. 11th st., Phila.
Warren-Knight Co.136 N. 12th st., Phila.
F. Weber & Co.1125 Chestnut st., Phila.

Fences.

Anchor Post Iron Works,
Real Estate Trust Bldg., Phila.

Fire Doors.

Merchant & Evans Co.,
2035 Washington ave., Phila.

Fireproofing.

Pearce Fireproof Co.1345 Arch st., Phila.
Trussed Concrete Steel Co.,
Commonwealth Bldg., Phila.

Floor Plates.

Alan Wood Iron and Steel Co.,
Widener Bldg., Phila.

Furnaces and Ranges.

Borden Stove Co.1311-13 Arch st., Phila.
Henry M. Miller.46-48-50 N. 2d st., Phila.
Keystone Supply & Mfg. Co.931 N. 9th st., Phila.
Richardson and Boynton Co.1342 Arch st., Phila.

Garage (Portable)

Service Equipment Co.Bourse Bldg., Phila.

Granite.

Holmesburg Granite Co.,
Commercial Trust Bldg., Phila.

Hauling Contractors.

Barber Contracting Co.,
1127 Land Title Bldg., Phila.

Heating Contractors.

Bowers Bros. & Co.1629 Ludlow st., Phila.

Heating Boilers.

Borden Stove Co.1311-13 Arch st., Phila.
Fleck Bros. Co.44 N. 5th st., Phila.
Keystone Supply & Mfg. Co.931 N. 9th st., Phila.
Richardson and Boynton Co.1342 Arch st., Phila.

Insurance.

Harris J. Latta.Penna. Bldg., Phila.
Insurance Co. of North America,
3rd and Walnut sts., Phila.

Lighting Fixtures.

Staman & Dickey.30 S. 16th st., Phila.

Lumber.

James E. Tague & Co.,
10th and Columbia ave., Phila.

Marble Mosaic.

Belfi Bros. & Co.1923 Market st., Phila.
Italian Marble Mosaic Co.433 Spruce st., Phila.
Roman Mosaic and Tile Co.435 Green st., Phila.

Metal Lath.

Pearce Fireproof Co.1345 Arch st., Phila.
Trussed Concrete Steel Co.,
Commonwealth Bldg., Phila.

Meters.

Philadelphia Meter Co.,
Real Estate Trust Bldg., Phila.

Mill Supplies.

The Fairbanks Co.7th and Arch sts., Phila.
Service Equipment Co.Bourse Bldg., Phila.

Paints and Varnishes.

Felton, Sibley & Co.136 N. 4th st., Phila.

Pipe Fittings and Valves.

The Fairbanks Co.7th and Arch sts., Phila.

Plumbing Fixtures.

Fleck Bros. Co.44 N. 5th st., Phila.
James A. Vogel Co.Wilmington, Del.
Keystone Supply & Mfg. Co.931 N. 9th st., Phila.

Preservatives (Wood and Concrete).

The Barrett Co.New York City and Phila.
F. E. Sagendorph.24th and Walnut sts., Phila.

Ranges.

Borden Stove Co.1311-13 Arch st., Phila.
Henry M. Miller.46-48-50 N. 2d st., Phila.
Richardson & Boynton Co.1342 Arch st., Phila.

Refrigerators.

Borden Stove Co.1311-13 Arch st., Phila.
Henry M. Miller.46-48-50 N. 2d st., Phila.

Reinforcing Bars.

Trussed Concrete Steel Co.,
Commonwealth Bldg., Phila.

Roofing.

The Barrett Co.New York City and Phila.

Roofing Slate.

C. F. Shellenberger.Builders' Exchange, Phila.

Roofing Tile.

O. W. Ketcham.Builders' Exchange, Phila.
C. F. Shellenberger.Builders' Exchange, Phila.

Scales.

The Fairbanks Co.7th and Arch sts., Phila.

Sewer Pipe and Flue Linings.

C. F. Shellenberger.Builders' Exchange, Phila.

Sewage Disposal.

Harrison, Mertz & Emlen, Inc.,
Commercial Trust Bldg., Phila.

Soundings.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.

Ridpath & Potter Co.Bourse Bldg., Phila.
John B. Rulon.1355 Colwyn st., Phila.

Sprinklers.

Merchant & Evans Co.,
2035 Washington ave., Phila.

Structural Engineer.

Harry C. Eisenbise Co.Penna. Bldg., Phila.

Surety Bonds.

Harris J. Latta.Penna. Bldg., Phila.

Terra Cotta (Architectural).

O. W. Ketcham.Builders' Exchange, Phila.

Test Borings.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Ridpath & Potter Co.Bourse Bldg., Phila.
John B. Rulon.1355 Colwyn st., Phila.

Tile and Terrazzo Work.

Belfi Bros. & Co.1923 Market st., Phila.
Italian Marble Mosaic Co.433 Spruce st., Phila.
Roman Mosaic and Tile Co.435 Green st., Phila.

Ventilators.

Merchant & Evans Co.,
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Wall Board.

Cell Board.

James E. Tague & Co.,
10th and Columbia ave., Phila.

Water Paint.

Wm. B. Southern,
N. W. Cor. 12th and Spruce sts., Phila.

Waterproofing.

The Barrett Co.New York City and Phila.

Weather Strip.

Diamond Flexible Metal Weather Strip Co.,
Geo. R. C. Johnston.Drexel Bldg., Phila.

C. W. MacDowell Agency,
2132 N. Van Pelt st., Phila.

Window Screens.

C. W. MacDowell Agency,
2132 N. Van Pelt st., Phila.

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Audubon Wire Cloth Co., Inc.Audubon, N. J.

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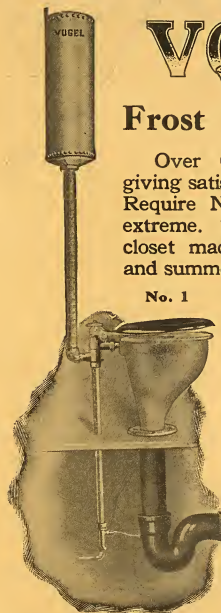
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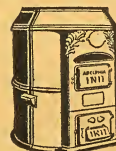
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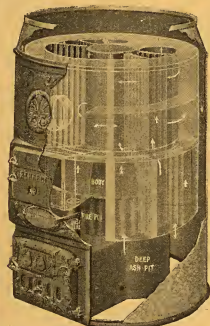
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March 6, 1918

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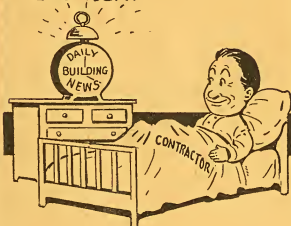


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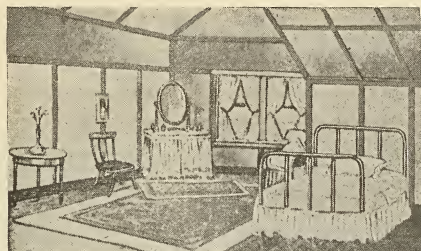
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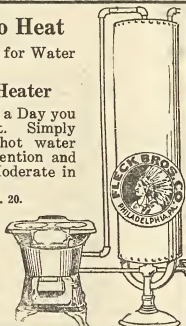
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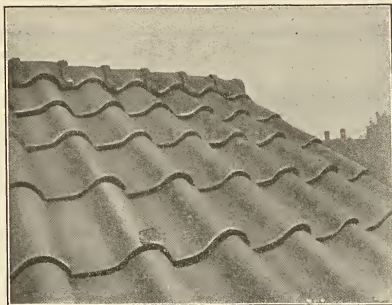
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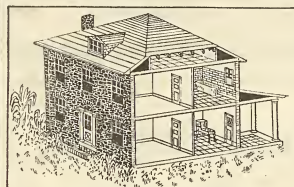


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PHILADELPHIA
March 6, 1918

BUILDERS' GUIDE

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As The Editor Sees It



PHILADELPHIA, in its role of "the city of homes," should be vitally interested in the "Better Home Exposition" which will be held in New York at the Grand Central Palace, from May 18th to 25th.

In the current issue of *Keith's Magazine* we read:

"This is to be a great exposition in which are to be gathered under one management all of the things which go into the materialization of a home with the avowed intention of giving assistance in the creation of the universally better homes idea, with the slogan 'Better Homes Make Better Home Defenders.' Comments gathered from the Recruiting Stations in the early days of the war showed the proportion of rejections large where applicants came from poor home conditions because they were not able to meet the physical requirements of the army, though the men were loyal and patriotic and anxious to serve their country in some branch of the service.

"There are comparatively few people who know what they want in the new home and how to go about it to get what they want; but a vastly larger number have the burning desire for a home without having any idea, lacking a 'wind-fall' or unexpected bequest, of how a man on a small salary with his growing family may be any possibility own a home, or the equity in one, where the money already put into it is safe. Business, sometimes big business works on a

small proportional margin of the total investment. Only the home builder, of the business undertakings—the aggregate of which all over the country piles up to so many figures—works individually, with little co-operation. Nevertheless, the financing of the undertaking could be managed if the would-be home owner knew just what he wanted as to the details of the building of the home; but here again is a different problem. This Better Homes Exposition is an effort to co-ordinate the different problems, giving a large amount of space to the interior, the decoration and furnishing of the home and the principles underlying its satisfactory accomplishment. The first exposition of this kind was held at Grand Rapids and found so much interest that similar lines are to be followed in this greater exposition.

"It is a curious fact that the word 'home' is not associated with the elaborate house or with the abode of the millionaire so closely as with that of the humble man.

"In arranging this display the range covered is from that of the home of the man with an income of a thousand dollars a year to that of the man who pays a goodly income tax.

"The different units of the exposition cover the factors which must co-operate in producing better homes. Beginning with the Savings Bank and its plans of saving money toward the purchase of a lot and the building and outfitting of the

home; this is followed by a consideration of a proper selection of building lots. Builders and building materials form a part of this division.

"A large amount of space will be devoted to the furnishing and treatment of individual rooms. Something like fifty exhibit rooms will be furnished and outfitted with carefully selected furniture under the direction of special experts. The plan is to show to the public, rooms furnished in the utmost taste and perfect harmony of color, together with explanatory lectures and talks giving the visitors an idea of the 'why and wherefore' of the decoration. The rooms will demonstrate methods of decoration for the home, from that of the man with an income of a thousand a year, ranging upward.

"Suits of model rooms will be arranged by experts each day in the presence of the visitors, and guides will escort people through these rooms.

"Popularizing art' is the term which has been applied to such talks as those initiated by that ingenious art worker, Maurice I. Flagg, Director of the Minnesota State Art Society, in the State Art Exhibits at the State Fair and given by Dudley Crafts Watson, Curator of the Milwaukee Art Museum, with marked success for the last several years. Such studio talks for people who are not artists will be a feature of the exposition.

"One division will be given over to household utilities, while another divi-

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sion will be devoted to educational features where in a miniature theatre will be given lectures on art in the home, home decoration, food talks, travelogues, movies of industries, talks on the designing of furniture, et cetera. There will be exhibits of landscape gardening work and materials, flowers and plants, and all of the manifold things which go into the making of a successful home.

"The Domestic Science features of the Better Homes Show will be of great importance from an educational standpoint. There will be a series of exhibits and demonstrations of model dining rooms, laundry rooms, kitchen furnishings, and a number of talks and lectures. The cookery talks will be featured along war time thrift.

"One of the unusual features of exposition will be found in the center of the main floor of the exposition hall. Here will be set a revolving stage with fountains and scenery for a novel fashion show review with live models of men, women and children, showing the latest styles in house dresses, home costumings, service uniforms for house servants, dressing gowns and full dress affairs in costumes.

"As a popular educational influence an exposition of this kind may have advantages over the museum, the school or the shop. In this respect the museum and the school fall short because they lack touch with life; the shop because it is too close to life to see beyond its sordid details.

"Before American homes will be really satisfactory people must realize that a chair is more than a place to sit, a table more than a thing from which to eat, and that a davenport has other charms than just a place to rest."

* * *

FOLLOWING the Government's decision that "Better Homes Make Better Home Defenders" comes the announcement that the Government will spend \$50,000,000 to furnish housing and local transportation facilities for the men employed in the ship building industry. This is of peculiar interest to Philadelphia as the first of these homes will be erected in Philadelphia.

J. Rogers Flannery, director of housing for the Emergency Fleet Corporation, is completing the plans for the expenditure of the funds in such fashion as to absolutely protect the men from exploitation through high rentals.

Mr. Flannery has issued the following statement covering the plan of the Shipbuilding Board:

"We have conducted a survey of housing conditions at each ship yard, this because competent labor can never be re-

tained or efficient production be maintained except where living conditions are adequate and proper.

"Whenever construction is necessary the modus operandi will ordinarily be as follows:

"The shipbuilding company will apply to the Fleet Corporation for the loan of a specified sum of money with which to construct housing accommodations for its present employees or those it expects to employ in the immediate future.

"Should the Fleet Corporation, after investigation, determine such housing necessary, it will loan to the shipbuilding company the money required to defray the actual cost of constructing the necessary housing facilities. The Fleet Corporation loan will be amortized over a period of ten years, bearing interest at the rate of five per cent., payable semi-annually, and be secured by a first mortgage upon the real estate upon which the development is had. The men will be protected from high rentals under any circumstances.

"The loan being assured, the shipbuilding company will organize a subsidiary company, which will acquire at its own cost and expense, and held in its own name, real estate upon which the houses would be erected.

"This subsidiary company will have charge of the maintenance, the renting and sale of these houses; it will be restricted in its right to pay dividends, salaries and various other expenses, until such time as the loan to the Fleet Corporation has been entirely paid, and even these restrictions will be continued beyond that time, for the benefit of the owners of the houses and of these persons living in that vicinity and, above all, for the protection of the men.

"The Fleet Corporation will control the rental and sales value of the houses until the loan has been entirely satisfied. Proper provisions will be made for the release from the mortgages of houses as the same are sold. Measures will be taken to make possible the purchase of homes by workmen, who will be permitted to pay certain portions of the purchase price in cash at the time of the purchase and to carry the balance of the purchase money upon mortgage security.

"While economy will be the watchword of the housing division in providing housing facilities at these various shipyards, yet every effort will be made to anticipate and provide for the comfort and welfare of the great army of Government artisans engaged in the most important task of the hour—construction of ships."

* * *

A RECENT issue of *Realty* presented a "Build Now" argument based on conditions which pre-

vailed at the time of the Civil War. The writer says:

"Now is the time to build because the price levels of labor and building material of before the war have gone forever. They will not return with the close of the war. The rates of to-day will continue after the struggle has been decided."

Opposed to this view comes a letter from Secretary of the Treasury McAdoo to Frank W. Conner, Washington representative of the *American Lumberman*, in which the former urges curtailment of building operations. The letter says:

"Building operations absorb the very materials and the very class of labor and the very kind of money the Government requires most urgently at this time.

"Where it is a question of building a new home simply because it would afford greater comfort, the operation should not be undertaken. Where it is on account of sanitary conditions or because, without such construction, other operations essential at this time for the welfare of the country would suffer, the work should be undertaken. This applies equally to construction work in cities and towns and in farming districts."

It would seem in looking at the statement compiled by William W. Gamble, Statistician in the Bureau of Building Inspection, that Philadelphia is upholding Secretary McAdoo's view of the situation.

The report shows the estimate cost of building work, for which permits were granted during February was \$612,775, as compared with \$1,684,510 last month and \$4,028,115 in the corresponding month of last year.

* * *

CONSIDERING the recent statistics showing the decrease in the building industry all over the country, it is only natural that we should focus our vision on the better times and building boom which is to be expected when labor and material prices assume a more normal aspect.

Quite prophetic and entirely encouraging was the recent meeting of the American City Planning Institute. Owen Brainard, chief architect for the Emergency Fleet Corporation, predicted for this city and State in the development of the lower Delaware the most stupendous expansion of industry probable anywhere on the American Continent. He said that the Hog Island project and the attendant development at the southwestern limits of the city represent only the beginning of a movement that will entirely change the river region between this city and Chester.

He continued: "Whatever may happen, whether the war ends soon or late, unexampled development is certain on

both sides of the river. Every foot of waterfront will be taken by new industries. The problems at Hog Island are nothing when compared to the problems involved for the general community in the face of this incomparably vaster outlook.

"The plans should be made now and I would suggest a commission to act for the Delaware River region as the Comprehensive Plans Committee has acted for Philadelphia. The problems of transportation, of sewerage, water supply and the like should be taken up at once, and intelligently co-ordinated."

Earlier in the discussion E. P. Goodrich, another housing expert, suggested that Philadelphia raze its slums and then use the building material over again in new and modern houses.

At this conference a resolution was adopted, suggesting that the President, as well as the State and local governments, arrange now to mitigate the conditions of unemployment likely to follow the war by arranging in advance for public works to be started immediately after the demobilization of the army. It was suggested that a Federal Commission of reconstruction be organized, all of which is freighted with good omen for Philadelphia and the building trades all over the country.

* * *

SHIPBUILDING interests here see a quick solution in the problem of housing the thousands of workers at the Hog Island plant, in the \$50,000,000 housing bill passed by Congress and signed by President Wilson.

The bill gives the Shipping Board authority to commandeer for workers all available empty hotels, apartment houses and dwellings in cities where ships are being built.

Enforcement of the bill will provide immediate accommodations for thousands of workmen in shipyards all over the country.

The bill also gives the Shipping Board authority to take over transportation systems, and it is probable a number of electric railway systems leading from cities to shipyards may be commandeered. It is expected also that some ferry and excursion boats will be seized for ferry lines to yards.

It is believed agents of the Shipping Board will come to Philadelphia in a few days to designate what property shall be seized for the housing of workers at Hog Island.

South Philadelphia, West Philadelphia and Camden will be combed for empty apartment houses and dwellings.

According to officials of the Shipping

Board, profiteering by unscrupulous real estate owners will be checked by the commandeering plans. The new bill not only gives the board power to commandeer vacant properties, but also the power to seize occupied houses adjacent to shipyards.

These will be taken over, and tenants not connected with the shipping industry will be moved to other neighborhoods. Property will be purchased, or renting contracts entered into for the duration of the war.

Compensation for houses seized by the Government will be determined by the Emergency Fleet Corporation's division of public service under J. Rogers Flan-

nery. This division will also supervise the building of new houses.

Edward N. Hurley, chairman of the Shipping Board, said the matter of building new houses would be taken after all available property has been obtained under the seizure plan.

Mr. Hurley, chairman of the Shipping Board; Director-General McAdoo and Fuel Administrator Garfield conferred in Washington on priority orders. It is expected a decision will be reached on the appeal of Rear Admiral Bowles for priority for all orders to ship materials to shipyards and to sub-contractors engaged in the manufacture of parts for ships.

ARCHITECTURAL POLYCHROME DECORATION

Little success has so far rewarded contemporary efforts to revive the use of polychrome decoration in architecture. Perhaps, therefore, it may be of some help to analyze current methods, to ascertain the value of the elementary principles guiding practice, and also to examine carefully the types of decoration adapted to polychrome treatment.

Of recent years the Italian Renaissance has exercised a powerful influence on architects in this country, and many of the essays in polychrome have followed Italian models.

There is meagre evidence to prove that the Italian Renaissance architects regarded color as a desirable adjunct to their major schemes, so far as exteriors were concerned; in fact, it is doubtful whether they had much sympathy with its use. Classic ideals found expression in an intense effort to achieve purity of contour, severity of detail, and exquisite proportions based on Greek and Roman standards. It was not generally known that pigment had once illuminated many of the fragments from which their inspiration was derived; hence, it is most unlikely that the architect, reacting from Gothic emblazonment of color to classic austerity, would risk the use of an element calculated to disturb that serenity for which he strove.

In reviving the use of classic ornamentation the Renaissance designers adhered faithfully to motif and detail; the pronounced difference that is apparent in their interpretation is due to the influence of their esthetic aims, not to a deliberate modification. When they chose to relieve the severity of their facades with carving, their taste was best satisfied by relief modeled with subtle gradations of light and shade, with soft edges melting into the field on the light side and abrupt projections casting clearly defined shadows in contrast.

The general tendency to avoid any precise definition of mass-forms is a strong argument against such ornamentation having been intended for color application.

The fact that the Greeks used polychrome to a considerable extent is amply established by archeologists; but, so far, sufficient in-

formation has not been accumulated to determine the exact extent to which it was applied to each architectural unit during the evolution of the orders.

Many ornamental details standardized by Greek builders, in the stone carving, were simultaneously used by other craftsmen. Examples of painted Greek ornament exist to-day in their original form and can be seen on the beautiful vases made by the Greek potters. These contain much varied data that can be used as a basis for studying the conformation of detail and mass prepared solely for color effect. Comparison of detail so contrived, with corresponding carved versions of a certain technique, shows how the principles formulated by the color designers were followed by carvers when color was to be added. Pronounced differences exist in the treatment of the same motif or detail when produced for light and shade, or color, pointing in the latter case to a complete subordination of the carver's methods to the technical limitations and peculiarities of the painter's media. Ample proof may be deduced that basic principles were recognized and rigidly observed by artists working for the one effect or the other.

In analyzing the colored ornamentations on the Greek vases the foremost characteristic striking us is that form is primarily expressed by silhouette, decorative rhythm and contrast being attained by careful calculation of the relative value of motif and field.

Turning for comparison to those Renaissance carvings which, we assume, were created for light and shade only—this partly from the experience that no planning of color can produce a balanced result—we find that silhouetting of form is a matter of minor importance, and that the fashioning of planes, modulating passage of light, is the element of effect.

In ornamentation of this type, a detail, by varying the angle of its direction, the height of its embossment, and the treatment of its edges, may pass through all the modulations existing between high-light and shadow; this

alone is almost sufficient to invest a form with interest, which in plan or mass would hardly invite attention. Any insignificance in decorative mass or lack of symmetry, which is unobtrusive in such relief, is accentuated by coloring.

Light and shade, which is a common factor uniting all items in the uncolored version, is an element of disunion in polychrome, as the shadow-strength varies with the tone value of each tint.

In carvings prepared exclusively for light and shade, height of embossment is of greater importance than area of mass, the main motif of the composition asserting itself by accentuation of relief; but, if this design is treated in polychrome, the main motif has little more prominence than a secondary detail of equal area, resulting in a depreciation of decorative effect in the designing by a confusion of values.

Failure to grasp the fact that designing for color requires a special form of ornamental planning has been the most serious factor retarding the advancement of architectural polychrome. This effective method has a far higher import than any that can be realized by a casual tinting of embossment prepared for other purposes. The legitimate effect can only be attained by an interweaving of tints, produced by arranging their recurrence at chosen intervals. The contrasts of tone, area and tint, constituting the harmony, are the result of judicious planning and distribution of detail, assembled with the sole object of achieving color balance. These intricate essentials absolutely control success in polychrome design; it is consequently obvious that only by an exceptional hazard could ornamentation designed for light and shade be arranged in such manner as to serve satisfactorily for polychrome.

A review of modern attempts justifies the conclusion that this form of decoration is not yet recognized as a distinct art, with a specialized technique and a code of laws governing taste.

Our first instinct, when needing instruction or enlightenment in art matters, is to turn to the classics. Unfortunately, on the subject of color this resource is not available. To expect that more extensive archeological discoveries could provide us with the means to formulate good and safe rules for our guidance in the use of color would be an excessive indulgence in optimism.

The limited range of colors at the disposal of the ancients would, in all likelihood, be adjudged by our standards crude and inadequate and probably yield no more satisfaction to the eye than a Greek chorus would to the ear accustomed to the intricacies of Wagner.

Those rare instances in which we have reason to congratulate ourselves on our superiority over the ancients, in matters appertaining to art, have usually reference to some accessory method which has been subjected to scientific development, such as, for example, the manufacture of pigment. Our resources in this respect far surpass those of the Greeks, so that little advantage may be

expected from an acquaintance with classic precedent on a subject in which attainment was necessarily immature.

Our energy will find full occupation in separating from chaotic confusion those tints that are capable of producing harmonies consistent with architectonic dignity; these requiring to be adjusted in such order that they may be used without disturbing established proportions and applied to detail without giving it undue prominence or misplacing emphasis.

We find much evidence in Greek remains of the vast importance attached to such esthetic subtleties as, for instance, the adjustment of perspective when it interferes with horizontal or vertical lines, or compensation for the apparent diminution of mass when silhouetted against the sky, showing that many items too subtle for our superficial observation were taken into consideration and provided for. These facts encourage one to believe that a scrutiny of Greek ornamental sculpture may reveal solutions to some of the difficulties besetting us when we attempt the combination of color and relief.

An examination of ornamental sculpture decorating buildings erected in Greece during the fourth and fifth centuries, B. C., when polychrome was extensively used both in architecture and sculpture, reveals a number of examples carved with a very distinctive technique, differing essentially from the conventional renderings of such motifs, by the manner in which the edges of reliefs are treated.

Examples of this type are found on many of the finest buildings of the golden age, on the Parthenon, on the Erechtheum, and on others, of which fragments only remain. The peculiarity of this method is that the contour of the forms is bounded by a narrow, delicately embossed fillet giving additional projection to the edge, which distinguishes it from carving made for light and shade, with its tendency to efface edges on the light side.

Esthetic difficulties do not confine themselves to any period or race. There is no doubt that the problems which beset us, in combining color with relief, were just as formidable to the Greeks. They must have experienced, as we do, that color applied to carved detail, executed in accordance with the usual conventions, had unpleasantly hard edges and a tendency to make the object treated look unsubstantial and detached, and that attempts to rectify this by color outlining or tone gradation were not satisfying. There is little doubt, in the writer's estimation, that the Greeks devised the fillet treatment of edges as the remedy for this defect, which it completely neutralizes, and with which, incidentally, a very beautiful type of ornamentation was developed.

The light falling on the raised edge of the fillet, accentuated by its delicate shadow, adds an appearance of richness and softness to the colors which is unattainable by other means.

The fillet edge on the antefixes of the Parthenon is used with much judgment, for the purpose of preserving color value from en-

croachment by strong rays of light from the sky behind. In the antefixion of the Erechtheum we find a magnificent specimen of the peculiar type of decoration evolved on this principle, which shows the freedom of its application. In this carving, the unerring instinct which invariably guided the Greeks in these matters caused them to modify and even omit the fillet in places where its presence might detract from the elegance of ornamental growth.

This method has just as great a value now as then and is admirably adapted technically to the material in which the hopes of polychrome are centered—glazed clay products. The fillet outline would act as a cloison for the colored glazes; this method, having been identified in other branches of ceramic art in many countries and periods, could not be open to the imputation that it was a technique borrowed from another material to which it exclusively belonged.

Frequently terms applied to matters connected with art have a significance conveying much more than is included in their bare definition, this being the result of mental association with eminent achievements they have designated during generations. The word "polychrome" in its architectural application cannot, unfortunately, be included in this category. Traditions from which it might have gathered prestige have only recently acquired substance through the enterprise of savants rather than artists. In this country architectural works of such a nature represent experimentation rather than inspiration; they constitute as a general rule, the demonstration of a principle, cramped for want of an essential technique and lacking the means for poetic expression through undeveloped color facilities.

The majority of these schemes have been executed in terra cotta, with the limited assortment of tints obtainable by the single-fire process, precluding any subtle combinations or varied harmonies. This vital question is unfortunately controlled by commercial considerations, which for the moment are a serious obstacle to progress. As only a comparatively small proportion of the total area of a facade would generally be decorated in polychrome, it is to be hoped that architects may recognize the necessity of leaving sufficient financial margin for the manufacturer to develop and utilize this invaluable asset.

The prime reason for this condition is not so much parsimony on the part of the purchaser as the fact that the intrinsic value of color has not been firmly established by works in polychrome of a convincing nature.

Spontaneous recognition can only arise from proof of merit; when once this is firmly asserted, the considerations at stake will appear too precious to discard for a trifling difference of cost.

Good things in art have a currency of their own, in that they carry conviction of their worth even among those having no comprehension of their nature.—"Architectural Record."

PUBLIC APPRECIATION OF GOOD ARCHITECTURE

"Standards of ethics, standards of practice, and standards of esthetic expression are never realized or fully understood except through actual experiences and applications," said the Committee on Public Information in its report to the last annual convention of the American Institute of Architects.

"We want the public to recognize our standards of ethics and professional practice; we hope to awaken an interest in a better architectural environment; we long for an integration of taste. Can we not find some better way of focusing attention upon, and of making more vivid our ideals than fumbling about with statements and advertisements concerning the schedule of charges and kindred matter? There is, as a matter of fact, nothing vivid in such statements; and they appeal only to the relatively few who are, for the moment, engaged in building operations.

"There is a topic which is pertinent and of interest to many people; it concerns art, architecture, and taste as well as our political structure. This topic might well serve as the vivid axis which would interest our ideals and the complex conditions of the present day.

"Let us put away, as a matter for emphasis with the public, for the time being the subject of ethics, the schedule of charges and advertising, and concentrate upon that function of government which by its very nature is our problem to solve, because we are both architects and citizens. It is doubtful if any city or any State possesses a building policy worthy of the name. We know that our National Government has none at all. Here is our theme—Why not set about the formulation of such a policy which would be applicable to city, State and nation? This is a large program, and its formulation and adjustment to our present political and social structure would require time and a profound study of the forces in our democracy. The magnitude of the task should not deter us; we should rather consider that the time is opportune, for already important changes are being wrought in the machinery and function of government, particularly in connection with the formation of the budget and the establishment of definite policies of conservation, development, and growth. Some group with a knowledge of the problem and with imagination must blaze the trail; someone must formulate the legislative changes and provide the proper machinery which will end our aimless, blundering, and oftentimes dishonest method of providing physical properties belonging to the Government.

"It would be absurd to even hope that we could bring about an immediate change; but if we could focus attention upon this problem by a presentation of material related to conditions here and abroad, and at the same time present sound suggestions for solving the problem, we would make a very material contribution to this phase of government and to architecture of this century. There is not the slightest doubt but that the vigorous pushing

of such a general plan in every State would, in time, produce tangible results, while, at the same time, the ideas of the Institute would be made manifest in a very positive way.

"In the annual report of 1915 this Committee stated that a general appreciation of the meaning of architecture involved a fundamental change in our entire educational system. A further study of the question has not only reinforced this belief, but has also led to the formulation of certain definite ideas concerning details.

"In the mid-year report the Committee on Education, after outlining conditions in the colleges related to esthetic instruction and offering a number of suggestions concerning the content and character of courses which should be offered, says:

"Your Committee believes that the standing of architecture in this country depends quite as much on the general education of those who might be classed as the most cultivated portion of the community as it does upon the class of education that is given in architectural schools. Until the average educated man employing an architect has a more definite idea of what art is, it will always be difficult to establish architecture as a profession in which the qualities of an artist are the important factors."

"With this statement your Committee agrees in part. It sees, however, a danger in such a program, as further outlined in that report, for there is a fundamental difference and distinction between a culture which rests upon a set of imposed standards of taste and that which is the outgrowth and development of a people's conscious effort to express its own peculiar social and economic ideals in form and color. The mere acceptance of a form as representing an esthetic standard is more apt to result in stagnation than progress. The teaching of cultural courses in our colleges and universities would have a value if that teaching involved processes of reasoning and the relating of forms to the actuating forces producing them. Concerning this phase of the educational problem, the suggestion is made that, as a substitute for an arrangement of courses which would catalogue and label the art forms of the past, the more advanced work be so organized that the emphasis in study be focused upon a group of our own social and economic ideals, and the true meaning of architecture and esthetics be taught by suggesting to the student the nature of the appropriate form expression for these ideals. By the introduction of the 'present,' by relating a vivid social ideal to the same expressed in form, we would do much toward awakening an appreciation of architecture, both past and present.

"But does this satisfy? Is our process complete? In our suggestions for the architectural schools and for our college courses we have merely provided the formula of the developer; we have still to prepare the sensi-

tized plate to receive the impression. This involves the public schools, for it is here that our work must start. To suggest even the broad general outlines of such a program would require a volume by itself.

"It is not suggested that esthetics, or architecture, or art as such, be introduced or added to our now greatly overburdened curriculum of the secondary schools. We should, however, formulate in specific terms such a program as could be made to amalgamate itself with the admirable concept of education as a normal growth advocated by Doctor Dewey, and which now may be found in operation in the schools conducted upon what is known as the Wirt plan; what would be of value—what is needed—is a definite suggestion which would, even in the lowest grade, open the mind of the child to the significance of form, not through his being told, but through his own expeditions of discovery.

"In every sphere of esthetic interest we have attempted to provide education, but almost universally that attempt has been with the very few comprising the thin top layer of our social mass; it has been remote and unrelated to anything in our lives, with the result that we are surrounded by chaos and little else. Here is the problem. It is worthy of our most serious effort, and we will hope in vain for an integrated environment so long as education in esthetics follows the paths which lead only into the past."

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

The man who doesn't advertise, these days, is forgotten. The world is too busy to look up dead ones.

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The man with an order to place doesn't hunt you up in the city directory these days. He hasn't the time. If he can't find you in your trade magazine he can and does find somebody else, and that somebody else books the order.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residences (5), north side of Atlantic street, between Twenty-first and Twenty-second streets. Architects, Milligan & Pierson, 520 Walnut street, Philadelphia. Owner, A. P. Moloney, 2116 Venango street, Philadelphia. Brick, 2 stories, 16x46 feet, slag roof, stone foundations, hot water heating, combination lighting, tile work, hardwood floors. Owner is ready for sub-bids.

Residence (alts.), 2011 Chestnut street, Philadelphia. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner's name withheld. Consists of interior alterations, changing interior into physicians' offices and apartments, masonry and carpentry work, plumbing, vapor vacuum heating, electric wiring and fixtures, hardwood floors, plastering and painting. Architects taking sub-bids.

Residence (alts.), 6328 Vine street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, F. D. Bernardino, on premises. Consists of interior alterations. Plans in progress.

School (Heston), Fifty-fourth and Lansdowne avenue, Philadelphia. Architect, Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street. Brick, stone and reinforced concrete, 3 stories and basement, 95x36 feet, composition roof, cement floors, electric light, hollow metal sash, fire and hollow metal doors, ornamental iron work, metal lath, roof ventilators, wire work. Owners taking bids, due March 7th. Thompson Bros., 123 North Fifth street; Edw. Atkins, 249 South Twenty-fourth street; Thomas C. Trafford, 1613 Sansom street; H. H. Wehmer, 1004 West Lehigh avenue; McCaul Co., 1713 Sansom street; Ketcham & McQuade, 1029 Brown street; H. E. Baton, 1713 Sansom street; Warren-Moore Co., Colonial Trust Building, and Monaghan & Losse, Inc., 3016 Chestnut street, are figuring.

Residences (2), Frankford, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner's name withheld. Brick and stucco, 2½ stories, 16x46 feet, slate roof, stone foundations, hot air heating, electric lighting, tile work, hardwood floors. Plans in progress. Will be ready for bids in one week.

Manufacturing Building (add.), 911 North Ninth street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Keystone Supply and Manufacturing Co., on premises. Brick and steel, 2 stories. Plans in progress. Too early for details.

Engine House (13 stalls), Tulip street, south of Somerset street, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. Co., Reading Terminal, Philadelphia. Reinforced concrete and brick, 1 and 2 stories, 200 feet, J-M roof, concrete and asphalt and mastic floors, electric lighting, rolled steel sash, fire and hollow metal doors, hollow tile, waterproofing, ornamental iron work, wire work. Owners taking bids, due March 7th.

Irwin & Leighton, 126 North Twelfth street, and F. W. Mark Cont. Co., Finance Building, additional bidders.

Power House and Boiler Room, 2626-2655 Martha street, Philadelphia. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owners, L. M. Leberman Sons, Inc., on premises. Brick, slow burning, 1 story, 58x29 feet, slag roof, electric lighting, cement floors, hollow metal sash and skylights. Architects have received bids.

Girls' Trade School (alts.), Pine and Quince streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick, mill work, plastering. Owners taking bids, due March 7th. J. H. Jordan, Thirty-first and Oxford streets; T. C. Trafford, 1613 Sansom street; Mitchell Bros., 2125 Race street, and E. C. Durell, 1713 North Twenty-fourth street, are figuring.

Residences (56), Ruby and Warrington avenue, \$124,400. Architects, private plans. Owners, Ferguson & McDowell, 1003 South Fifty-first street, Philadelphia. Stone and brick, 2 stories, 16x34 feet, slag roof, hot water heating, combination lighting, pine floors. Owners will build.

Residences (10), Germantown, Philadelphia. Architect, Harry V. Nickels, 4400 Manyunk avenue, Philadelphia. Owner, Harry Shoemaker, Middle City Building, Philadelphia. Stone, 2½ stories, 26x42 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors, cement work, stone foundations. Plans about completed. Owner will be ready for sub-bids in about one week.

Garage, east side of Twelfth, north of Vine street, Philadelphia. Architects, Andrew J. Sauer & Co., 918 Chestnut street, Philadelphia. Owners, Nass Estate, care of architects. Brick, 1 story, 40x60 feet, slag roof, stone foundations, steam heating, electric lighting, hollow metal skylights, mill work, ventilators. Architects taking bids, due March 7th. F. A. Havens Co., 845 North Nineteenth street; H. G. Evans, 1417 North Warnock street; F. I. Wintz, 1618 North Twenty-seventh street; John McShain, 1610 North street; D. J. McNamee, 1621 North Fifteenth street; H. B. Boorse, 665 North Fifteenth street; Mitchell Bros., 2125 Race street, and Richards & Shourds, 1125 Spring street, are figuring.

Elevated Stations (4), Frankford Elevated, Philadelphia. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, tile and marble work, terrazzo work, rolled steel sash and skylights, hollow metal sash and doors, fire doors, iron stairs, cement floors, safety treads, roof ventilators, metal ceilings, wire work, ornamental iron work (electric work

and plumbing separate bids). Owners taking bids, due March 12th at noon. Edw. Atkins, 249 South Twenty-fourth street, and Pringle Borhwick, 8018 Germantown avenue, Germantown; Frank G. Stewart, 1619 Sansom street, Philadelphia, additional bidders.

Stores (2) and Storage Building, 3330-32 North Broad street, Philadelphia. Architect, private plans. Owner, Wm. C. Carmen, 1220 West Allegheny avenue, Philadelphia. Brick, 2 stories, 50x200 feet, slag roof, stone or concrete foundations, cement and reinforced concrete floors, steam or hot water heating, electric lighting, hollow metal sash and skylights, flush bulks. Owner is taking sub-bids.

Garage, 1310-18 North Fifth street, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner, I. Cohen, 1330-32 North Fifth street, Philadelphia. Brick and terra cotta, 2 stories, 190x75 feet, slag roof, stone foundations, slag, stone and yellow pine floors, electric lighting, rolled steel sash, hollow metal skylights, fire doors, ornamental iron work (heating and gasoline storage system reserved). Architect taking bids. Pomeroy Const. Co., 1609 Ransdell street; E. E. Hollenback, Inc., 1804 Brandywine street; F. A. Havens & Co., 845 North Nineteenth street, are figuring.

Apartments (alts.), 252-54 South Seventeenth street, Philadelphia. Architects, Bright & Myers, Otis Building, Philadelphia. Owner's name withheld. Four stories, slag roof, hot water heating, electric lighting, tile and marble work, composition and hardwood floors, metal lath, hollow metal doors, ornamental iron work. Architect taking bids, due as soon as possible. Albert Zellfelder, 151 S. Broad street, and Thos. C. Trafford, 1613 Sansom street, are figuring.

Store (alts. and add.), Eleventh and Market streets, Philadelphia. Architect, W. E. Snaman, Empire Building, Pittsburgh, Pa. Owners, Frank & Seder, 1033-35 Market street, Philadelphia. Brick and steel, 8 stories, asphalt and slate roof, pine and maple floors, hollow tile, elevators, tile and marble work, hollow metal sash, fire doors, ornamental iron work (lighting and heating reserved). Owners taking bids, due March 9th. H. E. Baton, 1713 Sansom street, is figuring.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

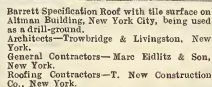
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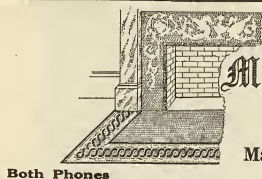
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Bank Building (alt.), 116 South Third street, Philadelphia, \$4,000. Architect, Mantle Fielding, 28 West Walnut Lane, Germantown. Owners, Girard National Bank, 116 South Third street, Philadelphia. Consists of interior alterations, mill work, painting. Contract awarded to Wm. J. Guhler Co., 219 East High street, Germantown.

Rectory (add.), Broad and Butler streets, \$7,000. Architect, private plans. Owners, St. Stephen's R. C. Church, care of Rev. John F. McQuade, 3307 North Broad street, Philadelphia. Brick, steel and concrete, second story addition, 16x60 feet, slag roof, steam heating, electric lighting, metal lath. Contract awarded to Henry P. Schneider, 3713 Old York road, Philadelphia.

Factory, Torresdale avenue and N street, Philadelphia, \$20,000. Architect, private plans. Owners, Louis Walter Manufacturing Co., on premises. Brick, 2 stories, 60x143 feet, slag roof, maple floors. Contract awarded to Geo. H. Thirsk, 1919 Berks street, Philadelphia.

Store and Office (alt. and add.), 1715-17 Ranstead street, \$10,000. Architect, private plans. Owners, F. P. Mellon Estate, 1635 Ranstead street, Philadelphia. Brick, 3 stories, 46x61 feet, slag roof, pine floors, fire escapes, stone foundations. Contract awarded to Geo. C. Dougherty, 1725 Ludlow street.

Residences (2), 1325-27 East Montgomery avenue, Philadelphia, \$12,000. Architect, private plans. Owner, P. F. Martin, 1335 East Montgomery avenue, Philadelphia. Brick, 2 stories, 16x34 feet, slag roof, stone foundations, steam heating, combination lighting tile and marble work, hardwood floors. Contract awarded to Philip Haibach Cont. Co., Twenty-sixth and Thompson streets, Philadelphia.

Residence and Garage, Twelfth and Loudon streets, \$6,000. Architect, private plans. Owner, Jacob Baltz, 3851 North Marshall street, Philadelphia. Brick, 2 stories, 16x47 feet and 1 story, 12x16 feet, slag roof, stone founda-

tions, hot water heating, electric lighting, pine and cement floors. Contract awarded to Wm. Baltz, 709 Butler street, Philadelphia.

Stable (alts. to Garage), 3921 Cambridge street, Philadelphia, \$4,000. Architect, private plans. Owners, Lykens Model Bakery, northeast corner of Thirty-ninth and Poplar streets. Consists of general renovation to change stable to garage. Contract awarded to P. Savar, 718 Snyder avenue, Philadelphia.

Store and Dwelling (alts.), 1137 South street, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Chas. J. McNulty, on premises. Brick, 3 stories, mill work, plastering, electric lighting, tile work. Contract awarded to Basch & Co., 1426 South Front street, Philadelphia.

Office Building (alt. and add.), 1512 Walnut street, Philadelphia. Architects, Pencikert & Wunder, 310 Chestnut street, Philadelphia. Owner, J. P. Badenhausen, 1425 Chestnut street, Philadelphia. Brick, steel and reinforced concrete, 5 stories, 24x156 feet, slag roof (steam heating and electric work reserv-

ed), wood floors, tile and marble work, hollow metal sash, fire doors, metal lath (elevators reserved). Contract awarded to A. R. Raff Cont. Co., 1635 Thompson street.

Bowling Alleys, 1917 Chestnut street, \$3,000. Architect, private plans. Owner, Mrs. H. R. Hatfield, 1725 Walnut street, Philadelphia. Mill work, iron work, 1 story, 83x11½ feet, slag roof, plank floors, electric lighting. Contract awarded to Wark-Yardley, 1737 Filbert street, Philadelphia.

Dye Works (alt. and add.), Seventeenth and Melon streets, Philadelphia, \$5,000. Architect, private plans. Owners, A. F. Bornot Bros. & Co., Seventeenth and Fairmount avenue. Brick and concrete, 1 story, 38x78 feet, steel and concrete roof, cement floors, rolled steel sash and skylights, hollow metal skylights, fire doors (heating and lighting reserved). Contract awarded to P. Haibach Cont. Co., Twenty-sixth and Thompson streets.

Dwelling (alt.), 2036 Diamond street, \$3,500. Architect, private plans. Owner, P. A. Green-span, Drexel Building, Philadelphia. Consists of interior alterations, 3 stories, hot water heating, combination lighting, pine floors. Contract awarded to Frank & Kaiser, 1517 S. Sixth street.

Garage, 1814-16 Kater street, Philadelphia, \$2,600. Architect, private plans. Owner, J. J. Connor, 1516 Kater street, Philadelphia. Interior and exterior repair to fire damages. Contract awarded to David A. McClelland, 4011 Baring street.

Factory, Rhawn and Pennsylvania R. R., Philadelphia, \$1,200. Architect, private plans. Owners, American Manganese Bronze Co., Holmesburg, Philadelphia. Brick and frame, 1 story, 89x15 feet, slag roof. Contract awarded to F. W. Van Loon, Denekia, Building, Philadelphia.

Bridge (between two buildings), Third and Cumberland streets, \$3,100. Architect, private plans. Owners, Wm. Ayres & Sons Co., on premises. Iron work, corrugated sides and roof, cement floor, fire doors. Contract awarded to Chas. McCaul Co., 1713 Sansom street, Philadelphia.

PENNSYLVANIA

Construction News

Stores and Apartments (3), Third street, Chester, Pa. Architect, Clarence Brazier, Crozer Building, Chester, Pa. Owner, Hyman Stein, Eighth and Green streets, Chester, Pa. Hollow tile and stucco, 2½ stories, 52x140 feet, slate roof, steam heating, combination lighting, store fixtures, flush bulks, pine floors. Owner taking bids. R. H. Scroggins & Son, Chester, Pa., are figuring.

Residences (4), Chester, Pa. Architect, Clarence Brazier, Crozer Building, Chester, Pa. Owner, Hyman Stein, Chester, Pa. Hollow tile and stucco, 2½ stories, 18x42 feet, slate

roof, pine floors, steam heat, electric lighting. Owner taking bids. R. H. Scroggins & Son, Chester, Pa., are figuring.

Welfare Building, Ivy Rock, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Alan Wood, Iron and Steel Co., Widener Building, Philadelphia. Brick, 1 story, 30x50 feet, slag roof, tile and marble work (plumbing, electric lighting and heating reserved). Plans about completed. Architects will take bids in two weeks.

House and Tower and Outbuilding, Marcus Hook, Pa. Architect, private plans. Owners,

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U. S. Government, care of W. A. Young, 427
P. O. Building, Philadelphia. Brick, 2½ stories,
24x32 feet, and 1 story, 18x32 feet, slate
and concrete roofs, concrete and pine floors,
iron stairs, limestone trim; tower, 12x12 feet.
Owners taking bids, due March 14th. Wills-
Ludwick Co., 34 South Seventeenth street, and
Pomeroy Const. Co., 1609 Ranstead street;
Frank G. Stewart, 1619 Sansom street, Phila-
delphia, additional bidders.

Residences (4), Bethlehem, Pa. Architects.
Jacoby & Weishample, Allentown, Pa. Owner,
W. N. Yearick, Fifth and Market streets,
Bethlehem, Pa. Brick, 2 stories, 16x46 feet,
slate roof (hot water heat reserved), electric
lighting, hardwood floors, hollow tile. Owner
ready for general bids.

**Residences (25), East Allentown, Pa. Ar-
chitects, Jacoby & Weishample, Allentown,
Pa. Owners, Home Building and Renting Association,
Frank Senseschoch, superintendent, Cramer
of Commerce Building, Allentown, Pa. Brick,
2 stories, 14x30 feet, slag or rubberoid
roofs, hollow tile, stoves. Owners ready
for sub-bids.**

**Garage and Service Station, West Chestnut
street, Lancaster, Pa. Architects, Estep &
Shaub, Lancaster, Pa. Owner, Mrs. Caroline
H. Steinman, care of architects. Brick, 2 stor-
ies, 60x80 feet, slag roof, steam heating, elec-
tric lighting, hollow metal sash and fire doors,
concrete floors. Plans about completed. Ar-
chitects will take bids in one week.**

**Chapel (alts.), Valley Forge, Pa. Architects,
Zantinger, Borie & Medary, Fifteenth and
Walnut streets. Owners, Washington Memori-
al Chapel, Valley Forge, Pa. Consists of pav-
ing walks, mill work. Architects taking bids,
due as soon as possible. Wm. M. Sullivan,
Norristown, Pa., additional bidder.**

**Residence (alts.) and Garage, Hillside Road,
Lansdowne, Pa. Architects, Bunting & Shrig-
ley, 603 Chestnut street, Philadelphia. Owner,
Arthur Shrigley, 603 Chestnut street, Phila-
delphia. Frame and stucco, 1½ stories, 42x20
feet, slate roof, stone foundations, cement
and pine floors. Architect taking bids, due as
soon as possible. Barclay White Co., 1718 Sansom
street, Philadelphia, is figuring.**

**Residence, Chadd's Ford, Pa. Architect, Dr.
C. G. Helick, Sixteenth and Oxford streets,
Philadelphia. Owner, H. Pyle, Chadd's Ford,
Pa. Stone and hollow tile, 2½ stories, 30x48
feet, asbestos roof, hot water heating, electric
lighting, tile work yellow pine floors, stono
foundations. Plans about completed.**

**Residence and Garage, Easton, Pa. Archi-
tect, Dr. C. G. Helick, Sixteenth and Oxford
streets, Philadelphia. Owner, C. Norvin Rinck,
Easton, Pa. Hollow tile and plaster, 2½ stor-
ies, 32x42 feet, and 1 story, 18x30 feet, shingle
roof, hot water heating, electric lighting, tile
work, hardwood floors. Plans in progress.
Owner will take bids in about two weeks.**

**Club House, Antetum Lake, Pa. Architect,
C. J. Young, 520 Washington street, Reading,
Pa. Owners, Lakeview Country Club, care of
architect. Stucco, 2 stories, 38x60 feet, shingle
roof, pine floors (hot water heating and
plumbing reserved), electric lighting. Plans
in progress.**

**Residence (alt. and add.), Lebanon, Pa. Ar-
chitect, A. A. Ritcher, Sixth and Court streets,**

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Reading, Pa. Owner, H. H. Light, Lebanon,
Pa. Frame, 2½ stories, hot water heating and
electric lighting extensions, carpentry and
plastering. Plans in progress.

**Factory, Pottstown, Pa. Architect not se-
lected. Owners, North American Motor Co.,
Pottstown, Pa. One story. Work contem-
plated.**

**Residence and Garage, Fayette and Seventh
avenues, Conshohocken, Pa. Architect, Ernest
H. Yardley, 1718 Sansom street, Philadelphia.
Owner, Edwin W. Harrison, Real Estate Trust
Building, Philadelphia. Stone and brick, 2½
stories and basement, 61x70 feet, and 2 stories,
45x30 feet, slate roof, stone foundations, hot
water heating, electric lighting, tile and mar-
ble work, cement and oak floors, metal lath,
dampproofing. Architect taking bids, due
March 8th. A. L. Fretz & Son, Heed Building,
are figuring (only bidders).**

**Residence and Stable (alts. and add.), Ash-
bourne Road, Elkins Park, Pa. Architect, H.
Rex Stackhouse, 129 South Fifth street, Phila-
delphia. Owner, Charles Silverman, care of
architect. Hollow tile and stone, 3 stories,
40x30 feet; wing, 28x26 feet; stable, 2 stories,
stone foundations, slate roof, hollow tile (heat-
ing, lighting, tile and marble work and hard-
wood floors reserved). Architect taking bids,
due March 15th. Stacy Reeves & Sons, 2011
Market street; J. Sims Wilson Co., 1125 Brown
street; W. O. Springer, 1624 Latimer street;
Albert Zellfelder, 151 South Broad street,
Philadelphia, and W. John Stevens, Inc., Wyn-
cote, Pa., are figuring.**

**Office Building, Marcus Hook, Pa. Archi-
tect, W. G. Eckles, New Castle, Pa. Owners,
Sun Oil Company, Marcus Hook, Pa. Brick,
steel and terra cotta, 2 stories and basement,
47x35 feet, slag roof, cement and terrazzo
floors, steam heating, electric lighting, marble
and terrazzo work, hollow metal sash and sky-
lights, fire and hollow metal doors, hollow tile,
metal lath, safety treads, roof ventilators,
waterproofing, dampproofing, ornamental iron
work. Owners taking bids, due as soon as
possible. Pomeroy Const. Co., 1609 Ranstead**

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street, Philadelphia, and the Greim Wood-
working Co., Milton, Pa., additional bidders.

**Garage, Fifteenth and Howard streets, Har-
risburg, Pa., \$8,000. Architects, Fahnestock
& Raidabaugh, Patriot Building, Harrisburg.
Owner, C. L. Conover, Holly and Hillside
Road, Harrisburg, Pa. Brick and concrete, 1
story, 115x120 feet, slag roof, steam heating,
electric lighting, rolled steel sash, hollow metal
skylights, fire doors, roof ventilators. Con-
tract awarded to E. N. Lebo, 1922 Berry Hill,
Harrisburg, Pa.**

NEW JERSEY

Construction News

**Bungalow, Ventnor, N. J. Architect, Le
Roy B. Rothschild, Bulletin Building, Phila-
delphia. Owner, Harry Sachsenmaier, 141 N.
Third street, Philadelphia. Frame, 2½ stories,**

35x75 feet, shingle roof, stone foundations,
electric lighting, pine floors. Plans completed.
Architect will take bids in a few days.

Residence (alt. and add.), Moorestown, N.

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PHILADELPHIA, PENNA.

J. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owner's name withheld. Terra cotta, 2 stories, irregular in size, shingle roof, plumbing, hot water heating, electric lighting, tile work, hardwood floors. Architects taking preliminary bids from H. E. Grau Co., 1707 Sansom street, Philadelphia, and J. S. Rogers Co., Moorestown, N. J.

Hale School (alt. and add.), Throop and Commercial avenue, New Brunswick, N. J. Architect, Alex. Merchant, 363 George street, New Brunswick, N. J. Owners, Board of Education, New Brunswick, N. J. Brick, stone and concrete, 1 story, 99x12 feet and 2 stories, 34x51 feet, slag and slate roof, cement and pine floors, hollow tile, hollow metal skylights, kalamein doors, composition treads, roof ventilators, metal window guards, ornamental iron work (heating, plumbing and lighting reserved). Owners taking bids, due March 8th. Hughes-Foulkrod Co., Commonwealth Building, Philadelphia; Matthews Const. Co., Princeton, N. J., are figuring.

Washington School (alts. and add.), French and Lewis streets, New Brunswick, N. J. Architect, Alex. Merchant, 363 George street, New Brunswick, N. J. Owners, Board of Education, New Brunswick, N. J. Brick and stone, 2 stories, 96x31 feet, slag roof, cement floors, tile work, metal lath, ornamental iron work, composition treads, roof ventilators, metal window guards, waterproofing (heating, lighting and plumbing reserved). Owners taking bids, due March 8th. Hughes-Foulkrod Co., Commonwealth Building, Philadelphia, and Matthews Const. Co., Princeton, N. J., are figuring.

Apartment House, Pacific and Providence avenues, Atlantic City, N. J. Architect, Seward Dobbins, South Virginia avenue, Atlantic City, N. J. Owner, M. L. Vetter, Atlantic City, N. J. Hollow tile and stucco, 3 stories, 36x85 feet, slag roof, hot water heating, electric lighting, pine floors. Architect taking bids, due as soon as possible. Chas. Corson, Lincoln, N. J.; Harry Scull and Hampton Bros., Atlantic City, N. J., are figuring.

Stable, Northfield, N. J. Architect, Hudson Vaughn, Guarantee Trust Building, Atlantic City, N. J. Owners, Board of Chosen Freeholders, care of Enoch Johnson, Clerk, Law Building, Atlantic City, N. J. Frame and concrete, 1 story and loft, 35x56 feet, felt or rubberoid or asphalt roof, pine floors. Owner taking bids, due March 13th. A. B. Bowen, 106 South Cambridge street, Atlantic City, N. J.; Chas. T. Thompson and Jessie Yates, Pleasantville, N. J.; Chas. Corson and Wm. Sharrock, Linwood, N. J., are figuring.

Dwelling, Atlantic City, N. J. Architect, Wm. Hewitt, Guarantee Trust Building, Atlantic City, N. J. Owner, Antonio Siracusa, 101 South Sacramento avenue, Atlantic City, N. J. Brick, 3 stories, 36x62 feet. Plans in progress. Too early for details.

Lincoln School (alt. and add.), Barlett and Wycoff streets, New Brunswick, N. J. Architect, Alex. Merchant, 363 George street, New Brunswick, N. J. Owners, Board of Education, New Brunswick, Middlesex County, N. J. Reinforced concrete, brick and stone, 3 stories, 55x100 feet, slag and slate roof, pine floors, tile work, hollow tile, hollow metal skylights, ornamental iron work, roof ventilators, metal weather strips, waterproofing. Owners taking bids, due March 8th. Hughes-Foulkrod Co., Commonwealth Building, Philadelphia, and Matthews Const. Co., Princeton, N. J., are figuring.

Store Building (alts.), 1125-27-29 Broadway, Camden, \$3,500. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owner, Howard J. Dudley, on premises. Consists of general interior alterations, maple floors, metal lath, metal bulks. Architects will take bids, due March 16th. Plans ready on March 6th. Wm. C. Wifford, Geo. Bachmann, Wm. Draper, and Lewis T. West, all of Camden, N. J., and the Peterson Const. Co., Clayton, N. J., will figure.

School, Glassboro, N. J., \$75,000. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owners, Board of Education, Glassboro Township, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet,

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slag roof (steam heating, electric lighting, plumbing and furniture reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamein doors, dampproofing, ornamental iron work. Architects taking revised bids, due March 21st. R. C. Ballinger & Co., 218 North Thirteenth street; Evans Const. Co., 9 South Eighteenth street; Wills-Ludwick Co., 34 S. Seventeenth street; Metzger & Fisher, Otis Building, Philadelphia; The Peterson Const. Co., Clayton, N. J.; Geo. W. Shaner & Son, Palmyra, N. J.; Geo. Bachmann, 19 North Thirtieth street, Camden, N. J.; Frank C. Ware, Glassboro, N. J.; W. Beaumont, 12 S. Tennessee avenue, and Wesley B. Porch, Sheen Building, Atlantic City, N. J., are figuring.

Garage, South Broad street, Trenton, N. J. Architect, Wm. A. Kleeman, Trenton, N. J. Owner, Samuel Horowitz, South Broad street, Trenton, N. J. Brick, 1 story, 24x26 feet, slag roof, steam or hot water heating, electric lighting, concrete floors. Plans in progress.

Hospital, Trenton, N. J. Architect, Wm. A. Kleeman, Trenton, N. J. Owners, Department of Public Affairs, care of Mayor Donnelly, Trenton, N. J. Brick, 1 and 2 stories, 300x26 feet, slate roof, steam heat, electric light, tile and marble work, concrete floors, hollow tile, metal lath, elevators, safety treads, iron stairs. Plans completed. Owners will take bids in a few days.

New Jersey Contracts Awarded

Building No. 17, Camden, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Jos. Campbell Soup Co., Camden, N. J. Stone, reinforced concrete and brick, 5 stories, 55x172 feet, Metropolitan roof, rolled-steel sash, asphalt floors, (heating and electric lighting reserved). Contract awarded to Turner Concrete Steel Co., 1713 Sansom street, Philadelphia.

Warehouse, Building No. 20, Camden, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Jos. Campbell Soup Co., Camden, N. J. Concrete, steel and brick, 1 story, 200x450 feet, Metropolitan roof, rolled steel sash, metal skylights, fire doors (electric lighting and heating reserved). Contract awarded to Irwin &

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HEATING

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Philadelphia, Pa.

Leighton, 126 North Twelfth street, Philadelphia.

Store (alt.), 215 Broadway, Camden, N. J., \$2,500. Architect, private plans. Owner, Dr. C. G. Hoell, on premises. Consists of general interior alterations, carpentry and plastering. Contract awarded to Mockett Const. Co., Camden, N. J.

Delaware Construction News

Store Building, Sixth and King streets, Wilmington, Del., \$25,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, McMahon Bros., on premises. Brick (slow burning), 60x85 feet, slag roof, pine floors, hollow tile, metal lath, elevators, steam heating, electric lighting, hollow metal sash and skylights, metal bulks, fire escapes, iron stairs. Plans about completed. Architect ready for bids.

Apartment House, Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Gidel Podalasky, Seventh and Washington streets, Wilmington, Del. Brick, 3 stories (9 apartments), tin roof, hot water heating, electric lighting, tile work, pine floors. Architect ready for bids.

Residences (4), Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Gidel Podalasky, Seventh and Washington streets, Wilmington, Del. Brick, 2½ stories, (2) 16x55 feet and (2) 24x35 feet, composition roof, hot water heating, combination lighting, tile work, hardwood and yellow pine floors. Plans completed. Architect ready for bids.

Apartment Building (24 family), Twenty-fourth and Market streets, Wilmington, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. David Rossman, Twenty-third and Market streets, Wilmington, Del. Brick and terra cotta, 4 stories, 112x90 feet, slag roof, pine and hardwood floors, combination lighting. Plans about completed. Architect ready for bids.

Miscellaneous Construction News

Church, Toledo, Ohio. Architect, A. A. Rither, Sixth and Court streets, Reading, Pa. Owners, St. Stephen's Lutheran Church, care of Rev. E. J. Wackerwagel, Toledo, Ohio. Brick, 1 story and basement, 60x104 feet, slate roof, hardwood floors, electric lighting, metal lath, waterproofing. Revised plans in progress.

Hospital Corps Training School, Hampton Roads, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick veneer, 156x88 feet, 2 stories, interior court, 70x27 feet, concrete foundations, slag, slate and composition roof, cement, composition, tile and wood floors, steam heating, electric lighting, fire doors, ornamental iron work. Lowest bid submitted by J. T. Huckols, Richmond, Va.

Proposals

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 20, 1918.—Sealed proposals will be opened in this office at 3 P. M., April 3, 1918, for the construction of the United States assay office at New York, N. Y. The work includes deep

foundations, safety vaults, and certain mechanical equipment. Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., February 21, 1918.—Sealed proposals will be opened in this office at 3 P. M., April 3, 1918, for the construction of entrances for three safety vaults and furnishing certain vault lining and infusible metal alloy shapes for the United States assay office at New York, N. Y. Drawings and specifications may be obtained from the supervising chief engineer, room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 1437 Cayuga street, \$775. Mayer Shapiro (O), on premises. H. P. Schneider (C), 3713 York Road. Brick, 1 story, 13x20 feet, slag roof.

Garage, Rockland and Third streets, \$800. Christian Dear Sons (O and C), 227 North-east Boulevard. Brick, 1 story, 22x32 and 17x11 feet, slag roof.

Garage, Oriana and Callowhill streets, \$8,200. Philip C. Garrett (O), 409 Chestnut street. J. D. Fisher (C), 5424 Thompson street. Brick, 1 story, 51x78 feet, stone foundation, cement floor, slag roof.

Dwelling, Thirty-second and Coulter streets, \$8,000. M. Brown (O), West School Lane, Germantown. M. S. Oberholtzer (C), 5524 Pulaski avenue. Stone, 3 stories, 21x52 feet, shingle roof, hot air heating.

Junk Shop, 1112 Race street, \$5,000. Harry Silverman (O), 1329 North Sixth street. H. Imber (C), 1310 North Seventh street. Brick, 2 stories, 20x52 feet, slag roof.

Garage and Residence, Twelfth and Louden streets, \$6,000. Jacob Baltz (O), 3851 Marshall street. William Baltz (C), 709 Butler street. Brick, 1 story, 12x16 feet, slag roof, hot water heating; brick, 2 stories, 16x47 feet, slag roof, hot water heating.

Dwellings (2), 1325-27 East Montgomery avenue, \$12,000. P. F. Martin (O), 1335 East Montgomery avenue. Philip Haibach Cont. Co. (C), 1261 North Twenty-sixth street. Brick, 2 stories, 16x34 feet, slag roof.

Factory, Torresdale and N street, \$20,000. Louis Walter Manufacturing Co. (O), Torresdale and N streets. George H. Thirsk (C), 1919 Berks street. Brick, 2 stories, 60x143 feet, slag roof.

Garage, 723 Clinden avenue, \$400. James N. Mitchell (O and C), Forty-sixth and Market streets. Stone, 1 story, 14x21 feet, slag roof, cement floor.

Garages and Storeroom (2), 224 East Willow avenue, \$1,200. William Wolverton (O), 237 West Highland avenue. Wolverton & Co. (C), 28 East Willow Grove. Stone, 2 stories, 12x20 feet, concrete floor, metal ceilings, slag roof.

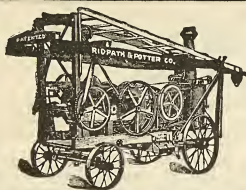
Shop, 6 North Forty-first street, \$1,600. E. J. Dyer (O), Bustleton, Pa. H. S. Gore (C), 12 North Forty-first street. Brick, 1 story, 20x50 feet, slag roof. Stone foundation and bulk fronts.

Dwellings (56), Ruby and Warrington avenue, \$124,400. Ferguson & McDowell (O and C), 1003 South Fifty-first street. Stone and brick, 2 stories, 16x34 feet, slag roof, hot water heating.

Office and Storehouse, 141 Wentz street, Olney, \$650. T. J. Malia (O and C), on premises. Brick, 1 story, 17x20 feet, slag roof.

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

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PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, 1804 East Allegheny avenue, \$775. M. S. Polis (O), 1532 North Tenth street. J. Goenspun (C), 551 North Sixth street. Flush bulk and alterations.

Dwellings (8), 2512 to 26 Tilton street, \$1,200. C. E. Doehman (O and C), 2622 Parrish street. Fire repairs.

Club House, 1917 Chestnut street, \$3,000. Mrs. Reed Hatfield (O), 1917 Chestnut street. Wark-Yardley Co. (C), 1737 Pilburt street. Iron on iron frame, 1 story, 12x71 feet, slag roof.

Dwelling, 811 South Eleventh street, \$500. Sol. Stano (O), on premises. A. Codani (C), 2026 South Eighth street. Brick, 2 stories, 12x4 feet, slag roof.

Red Cross Room, Broad and Glenwood avenue, \$300. American Red Cross (O), Philadelphia, Pa. F. H. Whiteman (C), 140 North Sixth street. Iron on iron frame, 1 story, 10x12 feet.

Dwelling, 2036 Diamond street, \$3,500. P. A. Greenspan (O), 648 Drexel Building. Frank Kaiser (C), 1517 South Sixth street. Alteration to an apartment.

Factory, Rhawn and Pennsylvania R. R., \$1,200. American Manganese Bronze Co. (O), Holmesburg, Philadelphia. P. W. VanLoon (C), Deneka Building. Brick, 1 story, 89x15 feet, iron on one side, slag roof.

Garage, 1814-16 Kater street, \$2,600. J. J. Connor (O), 1816 Kater street. David A. McClelland (C), 4011 Baring street. Fire repairs.

Shop, 106-08 Queen street, \$1,600. M. Toczykowski (O), 824 South Front street. J. Jansek (C), 3204 East Thompson street. Brick, 2 stories, 20x30 feet, slag roof, stone foundations.

Auto Store, 3251 Chestnut street, \$500. United Auto Store, Inc. (O), 905 North Broad street. France Missar (C), 3324 Chestnut street. Alterations and new bulk front.

Dwelling, 156 East Ontario street, \$1,000. Philip Sedelsky (O), on premises. John W. Mortimer (C), 3024 E street. Brick, 2 stories, 14x18 feet.

Residence, 2006 North Thirteenth street, \$1,180. Tener Langstroth (O), on premises. R. G. Hecker (C), Lansdale, Pa. Hot water heating plant.

Armory, Broad and Diamond streets, \$800. State of Pennsylvania (O). Wm. C. Haddock (C), Thirteenth and Market streets. Temporary seating stands.

Fence, Eighth and Olney streets, \$1,450.

Crew Levick Co. (O and C), on premises. Concrete fence.

Tank Support, Mascher and Turner streets, \$1,000. David N. Hess (O), on premises. Harry Drake (C), 3139 Frankford avenue. Alterations and two 2000 wood tanks.

Store and Dwelling, 1535 South Eleventh street, \$300. Tony Romain (O), on premises. Frank Lucia (C), 1941 South Iskminger street. Flush bulk window.

Store and Dwelling, 2850 Germantown avenue, \$1,000. Wm. Happold (C), Bala, Pa. H. P. Werner (C), 3245 Germantown avenue. Fire repairs.

Boiler House, Ninth and Willow streets, \$4,000. Swift & Co. (O), Ninth and Noble streets. Uniflow Boiler Co. (C), 825 Harrison Building. Two high pressure boilers.

Garage, 2948 North Orkney street, \$300. John Myers & Son (O), on premises. Harry C. Kooker (C), 3049 North Fifth street. Alterations.

Garage, 3628-30 Haverford avenue, \$8,000. Joseph Kieserman (O and C), on premises. Brick, 1 story, 50x148 feet, slag roof.

Dwellings, 408-10 South Sixtieth street, \$2,800. L. Colposion (O), 5926 Walnut street. A. M. Mahjoubian (C), 5926 Walnut street. Brick, 1 story, 8x16 feet, and alterations.

Dwelling, Sixty-ninth and Lawnton avenue, \$1,000. H. Jacobs (O), on premises. W. J. Gruhler Co. (C), 219 High street. Fire damage.

Store and Offices, 1715-17 Ranstead street, \$10,000. F. P. Mellon Estate (O), Bryn Mawr. George C. Dougherty (C), 1725 Ludlow street. Brick, 3 stories, 46x61 feet, stone foundation, slag roof, fire escapes.

Store and Dwelling, 1125 South street, \$1,200. I. Malis (O), 313 South street. J. Gorchor (C), 4116 Girard avenue. Fire repairs.

Dwelling, 1303 Farson street, \$500. A. Maso (O), 1303 Preston street. John DeSanti (C), 4913 Lancaster avenue. Brick, 2 stories, 16x8 feet, slag roof.

Stable, 3921 Cambridge street, \$4,000. Lykens Model Bakery (O), northeast corner of Thirty-ninth and Poplar streets. Philip Savar (C), 718 Snyder avenue. Alterations to garage.

Store and Dwelling, 1608 North Front street, \$800. Mrs. Lydia Kligerman (O), Dewalt, Pa. Jacob Joseph (C), 1608 South Orkney street. Take out bulk and replace with new front.

Hospital, Forty-fourth and Market streets,

\$400. Pennsylvania Hospital (O), on premises. J. Morris Daniels (C), 252 South Juniper street. Repair roof damage by storm.

Store and Dwelling, 509 West Cumberland street, \$300. Harry H. Wehmyer (O and C), 1004 West Lehigh avenue. Flush bulk and alterations.

Dwelling, 1312 Ellsworth street, \$400. Paulo Mateo (O), on premises. Nicholas Nardy (C), 763 South Thirteenth street. Brick, second story addition, 14x12 feet.

Store and Dwelling, 38 South Fifty-second street, \$900. Louis Winkelman (O), 16 South Fifty-second street. Basch & Co. (C), 1426 South Front street. Alterations, new bulks.

Stores and Apartments, Green Lane and Ridge avenue, \$10,000. Roxborough Trust Co. (O), on premises. Wm. H. Eddleman & Sons (C), 453 Green Lane, Roxborough. Slate roof and steam heating plant and alterations.

Store and Dwelling, Marshall and Poplar streets, \$1,000. A. Bolamkin (O), 6115 Locust street. V. Rose (C), 315 Washington avenue. New bulk and alterations.

Hotel, 518 South Fifteenth street, \$4,800. A. S. Jones (O), 514 South Fifteenth street. J. F. Trent (C), 2041 Master street. Brick, 2 stories, 16x28 feet, slag roof.

Office, Frankford Creek and Wingoheoking street, \$1,000. Philadelphia Pelt Co. (O), Frankford, Philadelphia. J. A. Hand (C), 8029 Frankford avenue. Brick, 1 story, 18x17 feet, slag roofing.

Store and Dwelling, 5528 Oxford street, \$1,500. Sarah P. Stover (O), 1927 North Twelfth street. A. W. Spencer (C), Logan. Interior alterations.

Open Shed, 1105 Frankford avenue, \$800. Otis Elevator Co. (O), on premises. Smith-Hardican Co. (C), 1606 Cherry street. Addition to open shed, 15x90 feet.

Store, 69 North Second street, \$600. George M. Moore (O), 512 Horner Building. Eugene G. Bleck (C), 3339 Frankford avenue. General repairs.

Store and Dwelling, 1340 South Fifth street, \$500. B. Savitzky (O), on premises. B. Shestack (C), 528 Reed street. Fire repairs.

Machine Shop, Salmon and Tioga streets, \$3,000. Quaker City Iron Works (O and C), Richmond and Tioga streets. Brick, 1 story, 59x67 feet, steel sash, slag roof.

Factory, Penn and Belfield streets, \$600. National Umbrella Frame Co. (O), 302 Thompson street. Geo. W. Whittemor (C), 403 East Penn street. Alterations.

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

WOOD—IN BUILDING CONSTRUCTION

No other building material expresses the sense of home as does wood. That peculiar aroma which gathers around the sense of home ownership seems fittingly expressed in the house built of wood. One loves the smell of new timbers and revels in the sight of the house growing to completion in the time-honored way. The basic idea of a home, to most people, is a home built of and finished in wood. When any other material is considered it must show its reason for replacing this long-fostered feeling for wood, and this feeling is changed only, to most people, as more satisfactory homes, built in other materials by the progressive reformer, make an appeal to the imagination.

In planning the home there are two points which are usually considered: Its appearance outside and in,—the livable quality, and the quality of permanence, always with the background of the possible cost limit. Either the house is built of masonry, clay products, or concrete, or it is built of wood. For the great majority of individual homes, the main construction of the house is of wood, though it may be veneered with brick, or finished in stucco.

Hardwood and Soft Wood.

The sum total of the knowledge of woods to most people is the difference between hard woods and soft woods, and a more or less vague identification of the best known hardwoods, recognized by the characteristic grain of the wood.

Even these well-known terms are more or less misleading to most people. Speaking of the physical properties of wood, R. S. Kellogg, in his book on "Lumber and Its Uses," which is a standard authority on lumber, from which we quote, says:

"The commercial terms, 'hardwood' and 'softwood,' do not correspond to the physical characteristics of hardness or softness, and are of little real value in this respect. As ordinarily used, the term 'softwood' is given to all trees of the family that the botanists call 'coniferous' or 'needle-leaved.' These are the pines, firs, spruces, hemlocks, cypress, larch, redwood, tamarack, cedars, etc. The term 'hardwood' is commonly applied to the species which botanists call 'broad-leaved,' represented by the oaks, maples, hickories, elms, ashes, basswood, beech, birches, walnut, etc. The slightest experience with wood shows that these terms give little indication of the physical properties of the species to which they refer.

"Some hardwoods are weaker than some soft woods; and some soft woods, notably long leaf pine, are stronger than many hardwoods. "It appears that among the hardwoods black locust is the strongest among them in proportion to its weight. Redwood is the

strongest soft wood in proportion to its weight. In fact, redwood appears to be the strongest in proportion to its weight of any wood yet tested at the Forest Service Laboratory with the exception of black locust. Redwood is a very soft, light, straight-grained soft wood, of great size and durability.

"Hardness is a most important property of wood, since resistance to wear is necessary for a large number of purposes. The hardwoods as a class average from two to three times as hard as the soft woods. Nevertheless, the hardest soft wood, longleaf pine (of the yellow pine group) is harder than basswood and red cherry. Their softness and ease of working make the soft woods as valuable for many purposes as are the hardwoods for other purposes."

Qualities of Wood.

The qualities of wood which are required in building a house are numerous and as a general thing no one wood will fill all the conditions, so the kind of wood selected for each use must be made with a knowledge of its properties. Many home owners leave this selection largely or entirely to the builder or contractor, taking an interest only when it comes to the interior finish of the house. The man who is not overwhelmed with his daily business often likes to make a "hobby" of the building of his own home while it is in progress and know for himself some of the more or less technical points and exercise his own judgment in the selection. To such, a tabulation of specific woods, showing special qualities of each, is instantly converted from a set of dry statistics, when he decides to build a home, into a mine of valuable information, into which he delves with the greatest pleasure. The fact that yellow pine has great strength; that the hardwoods make a beautiful interior finish to get the beauty of the grain of the wood, while the soft woods are easily worked if a painted finish is desired; that maple makes a very durable floor which is good looking at the same time; that oak makes a very beautiful and durable floor with its own distinctive qualities; all of these become matters of great interest to him.

Strength and Weight.

The weight of wood is of interest to the builder chiefly in its relation to its strength and the fact that weight is a much more tangible quality than strength. "There is a general rule that light wood is weak and that heavy wood is strong, or that strength is proportional to the weight. There are individual exceptions to this rule, but it holds for most woods." The actual weight of the wood in pounds is not usually important. For that reason, weight is a relative matter and is usually expressed by its "specific gravity," that is, its weight in relation to that of water.

Seasoning Timber.

Wood when it is growing is full of moisture, which is naturally evaporated when the cut lumber is exposed to the air, even though it is left exposed to the weather. When it is built into a house it is subjected to heat as well as to the evaporation of the air; hence if "green lumber" is used, a great shrinkage follows during the drying process. Only thoroughly dry lumber will make a good job of construction. Shrinkage of timbers in place in the house is a very powerful force and will move everything resting on the timbers, causing cracks in the plaster surface of the walls, opening cracks at the line between floor and wall, change of level where shrinkage is greater in one place than another, and many of the troubles which develop after the house has been built for a year.

The different woods express great individuality in the manner in which they dry, and the amount of shrinkage varies with the wood. Some woods have a much greater tendency to warp and twist in the drying process. Overcoming some of these peculiarities have given some of the big problems to the kilns and factories. But that is another story which we cannot take up here. The degree of seasoning, the method of drying, the manner in which the piece is cut from the tree, all make a difference in the finished product. Quarter-sawn timber shrinks less than slash-sawn. As a class, soft woods shrink less than hardwood. Shrinkage is chiefly across the grain, a board or timber loses in width and thickness but practically nothing in length when it is seasoned. Among soft woods, the cedars and white pines shrink the least, long leaf pine and tamarack the most. Among hardwoods, locust, osage orange and black cherry shrink little; basswood, white oak, birch and hickory have a greater shrinkage. The hardwoods require greater care in seasoning than do soft woods, on account of their more complex structure, in order to prevent warping and checking.

Grading and Defects.

In earlier times in this country only perfect or nearly perfect lumber was used in the better grades of work, with a very large wastage. With the closer utilization of all material, and especially of wood, the poorer grades of lumber have necessarily been used more closely. Lumber is separated into grades on the basis of the defects which it contains. Defects must not be of such a character as to impair the usefulness of the piece as a whole, when it is used as constructional lumber.

In the soft woods most largely used for general building purposes, there are usually three grades of common lumber, generally known as No. 1, No. 2 and No. 3, or terms of equivalent value. No. 1 dimension boards consist of sound, strong lumber suitable for first-class all-round building purposes. The defects allowed in this grade are not of a character to impair the strength of the piece. No. 2 contains more defects, but is useful for the same general purposes in places where less strength

is required. No. 3 stock is the lowest grade used for building purposes, and is generally employed for cheap, light or temporary structures. The man who expects to use much lumber or to use it economically will be well repaid if he familiarizes himself with the prin-

cipal grades and kinds of lumber. He will not only be able to build better and more cheaply, but with a better knowledge of what he may expect, and he is able to avail himself of any advantages which the local market may afford.—“Keith’s Magazine.”

IT WAS UNLAWFUL TO BATHE IN 1843

Bath tubs are so common to-day that it is almost impossible to imagine a world without them, says “The New York Mail.” And yet the first American bath tub was installed and dedicated so recently as December 20, 1842, and, for all I know to the contrary, it may be still in existence and in use.

Curiously enough, the scene of its setting up was Cincinnati, then a squalid frontier town, and even to-day surely no leader in culture. But Cincinnati, in those days, as in these, contained many enterprising merchants, and one of them was a man named Adam Thompson, a dealer in cotton and grain. This trade frequently took him to England, and in that country during the '30s he acquired the habit of bathing.

Still a Novelty

The bath tub was then still a novelty in England. It had been introduced in 1828 by Lord John Russell, and its use was yet confined to a small class of enthusiasts. Moreover, the English bath tub, then as now, was a puny and inconvenient contrivance—little more, in fact, than a glorified dish pan—and filling and emptying it required the attendance of a servant. Taking a bath, indeed, was a rather heavy ceremony, and Lord John in 1835 was said to be the only man in England who had yet come to doing it every day.

Thompson, who was of inventive fancy—he later devised the machine that is still used for bagging hams and bacon—conceived the notion that the English bath tub would be much improved if it were made large enough to admit the whole body of an adult man, and if its supply of water were admitted by pipes from a central reservoir and run off by the same means.

There was then, of course, no city water supply, at least in that part of the city, but Thompson had a large well in his garden, and he installed a pump. This pump, which was operated by six negroes, much like an old-time fire engine, was connected by a pipe with a cypress tank in the garret of the house, and here the water was stored until needed. From the tank two other pipes ran to the bath room. One, carrying cold water, was a direct line. The other, designed to provide warm water, ran down the great chimney of the kitchen and was coiled inside it like a giant spring.

The tub itself was of new design and became the grandfather of all the bath tubs of to-day. Thompson had it made by the leading Cincinnati cabinet maker, and its material was

Nicaraguan mahogany. It was nearly 7 feet long and fully 4 feet wide. To make it water tight the interior was lined with sheet lead, carefully soldered at the joints. The whole contraption weighed about 1,750 pounds, and the floor of the room in which it was placed had to be reinforced to support it. The exterior was elaborately polished.

Two Real Baths.

In this luxurious tub Thompson took two baths December 20, 1842—a cold one at 8 A. M., and a warm one some time in the afternoon. The warm water, heated by the kitchen fire, reached a temperature of 105 degrees. Christmas Day, having a party of gentlemen to dinner, he exhibited the new marvel to them and gave an exhibition of its use, and four of them, including a French visitor, Colonel Duchanel, risked plunges into it. The next day all Cincinnati had heard of it, and the local newspapers described it at length, and opened their columns to violent discussions of it.

On the one hand it was denounced as an epicurean and obnoxious toy from England, designed to corrupt the democratic simplicity of the republic, and on the other hand it was attacked by the medical faculty as dangerous to health, and a certain inviter of “phthisis, rheumatic fevers, inflammation of the lungs and the whole category of zymotic diseases.”

Bathing Prohibited.

The noise of the controversy soon reached other cities, and in more than one place medical opposition reached such strength that it was reflected in legislation. Late in 1843, for example, the Philadelphia Common Council considered an ordinance prohibiting bathing between November 1st and March 15th, and it failed of passage by two votes. During the same year the Legislature of Virginia laid a tax of \$30 a year on all bath tubs that might be set up. In Hartford, Providence, Charleston and Wilmington, Del., special and very heavy water rates were levied upon those who had them. Boston early in 1845 made bathing unlawful except upon medical advice, but the ordinance was never enforced, and in 1862 it was repealed.

Advertising is nothing more nor less than good salesmanship reduced to print. The business man who can put “sales talk” into type has learned the cardinal principle of good advertising.

HYDRATED LIME IN CONCRETE.

The structural and working qualities of concrete may be improved by the addition of a small proportion of hydrated lime, according to an article recently prepared by Bela Nagy, chief engineer of the Hydrated Lime Bureau, and it sufficiently reduces the cost of handling it to nearly or completely eliminate any additional expense, and furthermore secures a better structure with quicker and easier working conditions. While the solid contents of the concrete can be easily specified and their exact proportions maintained, it is much more difficult to regulate accurately or uniformly the quantity of water used in mixing, especially since the general desire of the designer is to reduce the proportion to a minimum, while the builder is likely to increase it to a considerable extent in the hope of promoting the rapidity of mixing and the facility of distribution through chutes and filling small or obstructed forms. An excess of water is likely to reduce the strength of the concrete, sometimes to a very great amount, and may cause honeycombing through the segregation of the aggregate in the forms. It may also cause classification of the fine and coarse particles and the formation of laitance on top. Sometimes an excess of water may cause chutes to choke up through the accumulation of solids and the flowing away of liquid. When concrete is mixed too wet it is likely to develop interior and surface imperfections that may require cutting out or repairs at considerable expense to the contractor and the ultimate injury of the work. When hydrated lime, the most plastic of building materials, is wet the impalpable powder loses its granular character and is converted into a smooth paste that lubricates the aggregate in the concrete and helps to give the latter homogeneity, density, strength, watertightness and a smooth, uniform exterior surface. Besides this, it greatly facilitates the handling and placing by increasing the mobility and plasticity of the wet concrete. It enables the mason to do more and better work. The addition of a small percentage of hydrated lime to concrete enables it to flow down chutes without segregation and to be spouted at a smaller angle than is possible for even the wettest concrete not containing lime. The concrete is generally more easily handled. It is firm enough to produce the greatest density and strength and to keep the aggregate suspended in the mass. Some contractors use hydrate of lime when it is not specified and consider it to their advantage to pay for it out of their own pockets.

You can't achieve anything worth while, whether it's peddling pills or discovering uncharted rivers, without advertising. If Columbus hadn't gone back and kicked up a racket about it, nobody in the Old World would have known yet that he had discovered anything.

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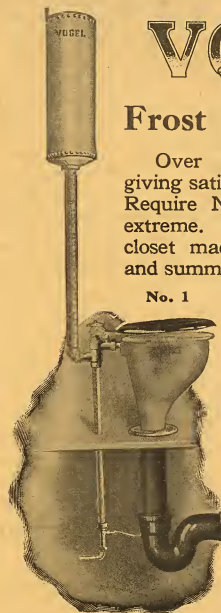
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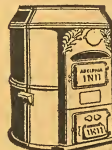
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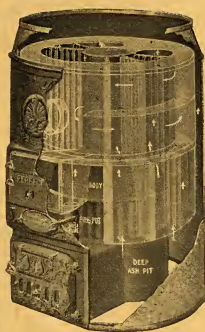
Builders' Guide

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Vol. XXXIII., No. 11
March 13, 1918

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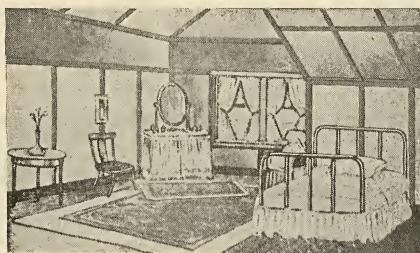
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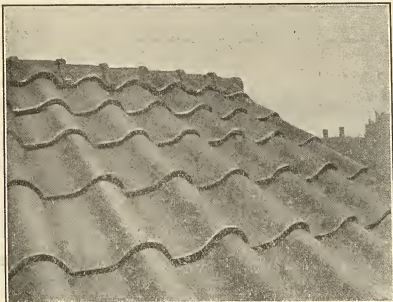
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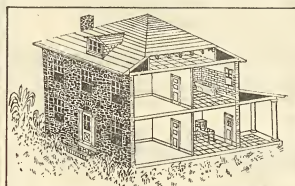
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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As The Editor Sees It



THERE is an old saying, "Two of trade can never agree," which we hope will be disproved in the case of the "Code of Ethical Practice" submitted by E. P. Massard at the seventh annual convention of Builders' Exchanges held recently at Pittsburgh. The code may also be termed a code of practical ethics, for it not only establishes a firm basis for the dignifying and exalting of the standards of the building trades, but suggests ways to assure for them greater financial success.

From a financial viewpoint the most important provision of the code is the one which provides for the elimination of "huckstering" of bids, a custom as undignified and unworthy of the building profession as it is unprofitable. To accomplish this end the code suggests that "General contractors and sub-contractors shall file true copies of their bids with their exchange or association before the time set for opening. Such copies shall be held unopened until one hour after the original bids are opened by the owner or architect and shall then be opened and tabulated by the secretary and be available for examination by those bidding."

It is only by concerted effort on the part of all the members of the profession that this suggestion can be carried out, but it is incomprehensible that anyone should fail to perceive the mutual benefit which would be derived by support-

ing and upholding this revolutionary suggestion.

Of financial value also are the provisions that every bidder submitting bids by invitation shall be compensated in the event of no award of the work being made to those bidding. And that no charge shall be made for us of plans in executing work, except where such a charge is stipulated in the bidding conditions.

When these ideals are realized bidders will be able to put a just profit in their estimates, knowing that there will be no chance of forcing bidders to reduce their bids, "huckstering," as this practice is generally known, after the estimates are opened. The contractor will not need to depend on possible extras for the financial success of the contract.

We cannot not conceive of a better plan of securing a fair deal for all concerned.

Speaking from an ethical viewpoint Mr. Massard urges that every one interested in building work should consider the far reaching effect of fair dealing with the owner, the architect and others interested. He considers it unethical also for anyone to submit a bid on work unless invited to do so by the owner or architect; and, also, he urges that the owner or his agent shall invite only competent and responsible bidders to estimate and thus render unnecessary the bidder's bond or certificate check.

It is impossible to over-estimate either

the ethical or the practical value of Mr. Massard's suggestions. Of such great importance and interest to all concerned is his code that reproduction in full follows:

"Section 1. We understand ethics to mean a declaration of principles and that members of this association shall regard themselves as being engaged in a profession in which there is a well-defined duty and obligation toward the public and themselves. The profession demands that the members use every honorable means to uphold the dignity and honor of the same, to exalt its standards and to extend its spirit of usefulness.

Section 2. Every member shall be mindful of the public welfare and should participate in those movements for public betterment in which his training and experience qualify him to act. He should support all public officials and others who have charge of enforcing safety regulations in the rightful performance of their duty, and should carefully comply with all the laws and regulations touching his profession and if any such appear to him unwise or unfair, he should endeavor to have them altered.

"Section 3. Members shall not falsely or maliciously injure, directly or indirectly, the business reputation or prospects of a fellow member, or in any other manner attempt to supplant him after definite steps have been taken toward his employment or toward the letting of a contract to him.

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"Section 4. Members should work in harmony with each and every one interested in building construction work, and on each individual contract shall consider the far-reaching effect of fair dealing with the owner, the architect and others interested—striving to bring into general practice better co-operation and a better understanding of relations toward each other.

RESPECT FOR LAWS.

"Section 5. All exchanges and associations shall be scrupulously careful that their rules, regulations and articles for the government of members do not violate the provisions of national or State laws against combinations; and members shall, in this sense, respect the rules and other articles of the exchange or association in any and all localities where they are competing for work or doing work.

"Section 6. Members shall infer that the owner or architect, or both, are competent to select the bidders from whom they desire bids on construction or repair projects, and that it would be unethical to submit a bid on any work unless invited to do so; forethought on the part of the owner or his agent as to competency and responsibility of the bidders invited enters into this question; consequently, no bidder's bond or certified check shall be required, and an award of the work shall be expected to be made to the lowest bidder.

"Section 7. Bids shall be offered only when a time and place has been designated, and they are to be opened in the presence of the bidders or their representatives, and shall be open to inspection by any one bidding on the work.

"Section 8. A general bidder having been awarded a contract involving sub-bids, shall award that particular portion of the work to the subcontractor whose bid was used as a basis for the general bid.

"Section 9. General contractors and subcontractors shall file true copies of their bids with their exchange or association before the time set for opening. Such copies shall be held unopened until one hour after the original bids are opened by the owner or architect and shall then be opened and tabulated by the secretary and be available for examination by those bidding.

"Section 10. Members shall discourage the practice on the part of the architect in asking for alternate bids, provided, however, that this section shall not be interpreted as prohibiting the specification and use of substitute materials, or methods of construction, or methods and materials in every way equal to those which are specified for the original bid.

"Section 11. Where specification requirements call for unit prices, members

in bidding shall declare that the unit price shall govern only where conditions of work and price remain the same as existing or known at the time of bidding.

"Section 12. Competitive bids submitted by invitation shall be subject to compensation to each and every bidder from the owner or the architect, or both, in the event of no award of the work being made to those bidding.

"Section 13. Members shall in no instance pay for the use of plans in executing work, except where a charge for plans is stipulated in bidding conditions.

"Section 14. Members shall discourage the practice of making a deposit for the use of plans in making estimates.

"Section 15. Members shall be mindful of the interest of the architectural profession and should in every way discourage the making of preliminary sketches and estimates for prospective builders.

"Section 16. Members shall encourage the practice on the part of the architect of including in the specifications under each heading all of the work of each trade.

"Section 17. Members should make every effort to extend the use of the standard contract document of the American Institute of Architects, third edition, without modification or change.

"Section 18. We recommend the fullest publicity in the handling of our business."

* * *

THERE is no doubt that the war is opening up avenues of industry to women, which otherwise might have remained forever barred.

For some time past, of course, women have been interesting themselves in architecture, interior decorating, and such pursuits, so closely allied with a woman's

activities and life. A very exclusive and successful interior decorating establishment in New York is headed by a woman.

A California woman conceived the novel and unique idea of building "Roof-Garden Bungalows" on the upper part of a large business building, and this has proved a very successful venture.

It is an undisputable fact that "though several million young men—the physical flower of the nation's labor supply—are in the armies, more people are at work in England to-day than ever before. Latest accounts indicate that considerably more than five million women are engaged in industry. Though military critics speak of France as being bled white, some figures recently compiled show decidedly more hands industrially employed than in 1914. "Bled white" France, you remember, is making the ordnance and ammunition for our troops.

After glancing at these statistics we are not so surprised to read that "at the age of thirty-two, Mrs. A. E. Crook, of Dallas, Texas, has mastered the knowledge of steamfitting, plumbing and electricity. Mrs. Crook is now in Washington in charge of the plumbing construction on Government works. Before coming to Washington, Mrs. Crook had achieved an enviable reputation in her native State and handled between eight hundred thousand and nine hundred thousand dollars' worth of contracts there."

And we wonder if we in America shall become accustomed, as they have in England and France, to women plumbers, electricians and the like. A noteworthy advance in this direction has been made in Philadelphia by the appointment of women to instruct seventh and eighth grade pupils in carpentry and shop work.

EDITORIAL NOTES

The committee representing the Master Builders' Exchange, of this city, and the National Association of Builders' Exchanges, upon its return from Washington, where it had conferred with Secretary of Commerce and Labor William B. Wilson, with a view to the elimination of labor troubles, expressed through its chairman, Colonel John R. Wiggins, great satisfaction with the progress made.

In the first place, Colonel Wiggins said, Secretary Wilson is heartily in favor of the plan suggested by the builders—the establishment of a Board of Conference, Conciliation and Arbitration, having supreme jurisdiction over and authority to settle labor disputes. It is in line, Mr. Wilson said, with a plan he has had in mind for some time, and he has no doubt that such a tribunal will go far toward

the elimination of such disputes. He has promised to arrange a meeting between the builders and the Labor Adjustment Board, of which former President Taft is a member, and later with the big leaders in the American Federation of Labor.

He has doubts that this board, which was appointed to expedite war work, should be asked to take up such private difficulties as may arise, but is of the opinion that a similar tribunal, organized for that purpose could accomplish great good.

There is every reason, Colonel Wiggins said, to believe that the national labor leaders would welcome such a tribunal, and both he and his fellow-committeemen feel greatly encouraged.

* * *

Director W. S. Gifford, of the Council of

National Defense, in a statement recently made before the Committee on Military Affairs of the Senate at Washington, says there has been a saving to the country of \$3,112,000, 000 as a result of the reduction of prices on iron and steel. This saving is based on the reduction from the prices ruling at the time the reduction was ordered.

A general surplus of labor in the East, Middle West and Pacific Coast and a shortage along the Gulf were reported at Washington in the first weekly summary of conditions issued by the United States employment service. The summary covered building trades, mechanics, skilled trades, common laborers and farm laborers.

Along the Atlantic seaboard from Delaware to Maine, including Pennsylvania, and in the Middle West, with the exception of Northern Illinois and Wisconsin, there is a surplus of workers in the building trades, due to cessation of new construction. There are more mechanics, skilled tradesmen and common laborers than jobs along the Pacific Coast. In Louisiana, Mississippi and Alabama both skilled and unskilled labor is in demand.

Pennsylvania, Tennessee and Florida are short of common labor, of which there is an abundance in all Western and Middle Western States. Little surplus of farm labor is reported anywhere, and calls for farm hands are being received from Southeastern Texas, along the Gulf and as far north as Maryland.

George E. Bartlett, Lincoln Building, is for "preparedness" all the way through. Believing that big business is sure to come when the present chaotic state is over, Mr. Bartlett has opened a yard at Norfolk, Va. The yard will be stocked to the limit, and once the railroad congestion is cleared up Mr. Bartlett will be able to "shoot" the lumber from the new yard to his customers without loss of time.

W. F. Trenary, Jr., succeeds Mr. W. R. Jenison as representative for the Harrison Safety Boiler Works, of Philadelphia, manufacturers of Cochrane Heaters and other steam appliances. Mr. Trenary's headquarters are at 419 Brown-Marx Building, Birmingham, Alabama.

Baker-Dunbar-Allen Co., 809 Stock Exchange Building, Philadelphia, announces the association of Mr. Joseph Escherick with that organization. The company, under Mr. Escherick's personal supervision, will represent the D. Connelly Boiler, the Foxboro Company and the Melting Instrument Co., heretofore represented by Mr. Escherick personally.

John V. Speth, Engineer and Contractor, has removed his office to 1615 Sansom street, and has opened a Brookline office at Brookline Station, Delaware County, Pa.

Low-Parker Engineering Co. has moved its offices from 45 Broadway, New York City, to 150 Nassau street.

C. W. Hunt Co., Inc., builders of elevating

and conveying machinery and industrial railways, have recently moved its New York office to 501 Fifth avenue.

Ransome Concrete Machinery Co., Dunellen, N. J., has consolidated with the Oskosh Manufacturing Co., Oskosh, Wis., under the name of the Ransome-Leach Co. This alliance places a new company in a position to handle the Western trade from the Oskosh factory and the Eastern trade from the Dunellen factory. One large warehouse will be established in every principal city, where the combined lines will be ready for immediate delivery. A full line of trench pumps, back fillers and material elevators have been added. The executive and the sales office is located at 115 Broadway, New York City.

George A. Shedden Co., builders, 37 East Twenty-eighth street, New York City, has discontinued business for the period of the war and will again resume as soon as peace has been declared. Mr. Shedden, president of the concern, has been commissioned lieutenant in the Aviation Corps and has been detailed for service with the field artillery. Charles H. Kelly, vice-president, has been appointed general superintendent of construction by the United States Government, and will have charge of the erection of 1,000 dwellings at Camden, N. J., from plans prepared by Electus D. Litchfield. These houses will be used to accommodate the employees of the different shipbuilding plants located along the river between Camden and Gloucester.

Snares and Trust Co. has removed its offices from the Woolworth Building, New York City, to 8 West Fortieth street.

F. C. Zachan, architect, has recently moved his office from 45 Clinton street, Newark, N. J., to Arlington, N. J.

John H. Coxhead, architect, has recently moved his offices from 924 Ellicott Square to the Liberty Building, Swan and Franklin streets, Buffalo, N. Y.

Colonel Edwin Augustus Stevens, one of the country's foremost engineers and widely experienced in shipbuilding, died in Washington, D. C., last week. Early in the war he was an inspector of shipyards for the Government. He designed the first screw ferryboat. Born in Philadelphia in 1858, Colonel Stevens was graduated from Princeton and received an engineering degree from Stevens Institute, which his father, Edwin A. Stevens, founded. Colonel Stevens' grandfather, John Stevens, was a member of the first Federal Congress. Colonel Stevens was vice-president of the American Society of Mechanical Engineers.

The twenty-fourth annual architectural exhibition of the Philadelphia Chapter of the American Institute of Architects and the T Square Club will open March 23 at the Art Alliance Building, 1823-25 Walnut street. The members of the Exhibition Board are Edmond

B. Gilchrist, John F. Harbeson, H. Lewis Shay, Robert R. McGoodwin, Leicester B. Holland, Grant M. Simon and Wilson Eyre, chairman.

The Government has published a very interesting report upon the substitution of other materials for wood, which was a part of the investigation of the Federal Trade Commission and of the Forest Service into conditions within the lumber industry, and is now for the first time made available to the general public. The report is illustrated with charts showing the relative trend in prices of lumber, brick, cements, structural iron and general prices for twenty-five years ending 1915; also other charts showing (in part) the consumption of building brick, of iron and steel structural shapes, natural and Portland cement, of clay building materials and of cut and wire nails. There is also a graphic study of building permits in twenty of the larger cities of the country. The increasing use of metal trim and metal furniture is graphically shown by another diagram. Copies of the report may be obtained for 15 cents from the Superintendent of Documents, Washington, D. C.

Among the various professional men and those who have really amounted to something in helping to develop the theatre-building of America, William Eckart, the theatre decorator of New York City, stands, without a doubt, in the lead. The owners of the Rivoli Theatre have acted wisely in again selecting William Eckart, and giving him full sway, in using his vast experience in colors and theatre decorations, thus bringing the Rivoli decorations to a successful conclusion, as was done about two years ago at the Bialto Theatre, by the same artist.

The Rivoli Theatre is pronounced by all severe art critics a step further in the expression of refinement and simplicity which shows the constant growth of this hard-working, economic artist. This point of economy, combined with decorative art, should be especially recognized of William Eckart's work in theatres. Although not an old man, he has for nearly thirty years constantly studied theatre conditions on these lines. Owners of theatre buildings, large and small, have tested this man's ability in every part of America, and the "Eckart Tones" for theatre decorations have become a necessity as part of a complete theatre building.

Then there is the question of executing contracts in the shortest time possible, which is so essential with theatre decorating. It is a well-recognized fact that William Eckart has never delayed the opening of a theatre. In fact, when he starts his work at a building, his rapid progress pushes other mechanics to an early completion. The example of this was again shown by William Eckart in decorating the Rivoli Theatre, which he completed inside of three weeks.

The National Fire Protection Association resumed this winter in the United States and Canada its campaign for the enactment of

city ordinances fixing liability for cost of extinguishing preventable fires upon individuals ignoring fire prevention orders. N. F. P. A. members in the various cities are to promote this legislation, following the Cleveland, Ohio, ordinance as a type. The pamphlet "Individual Liability for Fires Due to Carelessness or Neglect" has been reprinted for use in this campaign.

THE CONSOLE.

Of the many architectural forms that have been inherited by us from the French, perhaps none is in more common use than the "console." During the past hundred years the term has been frequently employed by the English-speaking architect to signify a supporting architectural member that projects half its height or less, or a bracket of any kind. Most frequently, however, the term is meant to convey the idea of a supporting brace in the form of a reverse scroll or letter S.

Prototypes of the console are found in the work of the preclassic builders. As the scroll of double curvature early acquires a place in the line repertoire of any beginner in the graphic arts, whether child or savage, it is not surprising that the most ancient historic styles should exhibit this design; it is seen in the Assyrian wave pattern, in the Persian scroll and in the Egyptian lotus capital. However, it remained for the Greeks to evolve the console as a perfected architectural form. With their pure marble and delicate sense of the beautiful in line and form, they produced such examples as are to be found supporting the entablature over the doorway of the Erechtheum. Here the delicacy of Greek ornamentation with bead and honeysuckle was wedded to the subtle curvature of the reverse scroll to produce a member at once ornate and functional.

The Romans, conquering the Grecian lands, were in turn conquered by Greek art. The volute console, although very beautifully developed by the Greeks, had been used by them but rarely. The Romans adopted it extensively, and were the first to employ it in a recumbent position in the bands supporting the projecting cornices of the Ionic and Corinthian orders and under projecting balconies.

During the art decline of the dark ages crude copies were made of antique consoles. These are often seen in the remains of the Early Christian and Romanesque art periods. They were followed by the Gothic bracket, so often seen in cathedrals supporting the statues of saints.

The Renaissance builders returned to the classic example of the console, remodeling and utilizing the motive with rich variety. The console was wisely handled until the extravagance of the Baroque and Rococo periods demoralized Renaissance art. The constructive purpose was wholly sacrificed for richness of design.

The console can be used in novel places and in a great variety of dimensions. Braces for supporting members, copings for walls and

raking cornices for pediments are seen moulded into this form of double curvature. While countless examples of its employment as a supporting member have established its prestige as such, analysis of the form itself gives little idea of efficient bearing power. Rather its lines tend to form a happy transition between the horizontal and the vertical, and

The particular use to which the theatre is to be put is the first consideration in determining what system of lighting must be employed. A house for the production of grand opera differs widely from one in which simple moving pictures are shown, and it is apparent that each type must be considered by itself. However, all theatres have a great deal in common and, with the exception of the small moving picture house, all are provided with a stage, all have auditoriums, either large or small, and all have some kind of lobby, and a facade which require lighting.

As far as the facade is concerned, it is unfortunately in most instances used for advertising purposes. For advertising electrical display lighting is required to announce a particular play or actor appearing in a current production. This usually takes the form of a display sign across the front of the building. After the architect has designed a good front and the owner has spent much money on its ornamentation, along comes the sign man to destroy the harmony with an ugly sign over the entire face of the building. Why this expenditure of time and money on art for a sign man to hide, is something the writer cannot quite understand. It should be the object of the architect to design the face of a building so that a sign could be installed without hiding all of the architecture, or the architect should take it upon himself to design the building and sign at the same time, so that architectural unity may result.

The marquee is a very important element in the exterior design. This not only serves its original purpose as a shelter, but when properly lighted has an indirect advertising value. It is not unusual to outline the marquee in panels with as many as four or five hundred lamps. The particular object of this style of lighting is to make a bright spot in what might otherwise be a dark street. Where theatre entrances join each other closely the marquee often spread a bright and attractive lane of light. In addition to performing its utilitarian purpose and that of light attraction, the marquee has been impressed into service for direct advertising. Attraction signs are attached to the sides and front, and projectors to illuminate the facade may also be hidden on it.

In the latest house to be erected in New York, the classic facade, on which there are no signs whatever, is lighted by flood lighting which emphasizes the architecture. The only signs on this particular building are small ones (the name of the theatre) at either end

lend themselves to ornate and graceful decoration. As an agent for the sympathetic unifying of diverse elements, rather than as a frankly distinct support in a constructional sense, has the console played its important role in the long procession of architectural styles.—Ralph Fanning, in "Architectural Record."

THEATRE ILLUMINATION

of the marquee. Underneath the marquee and against the building is a changeable attraction sign giving the attraction for the week.

The lobbies, halls and anterooms require very little comment, as their problems are simple. As a rule these portions of the house constitute just so many rooms, each of which must have its lighting equipment designed to meet the views of the architect. Considerable cove lighting is done at present, and, where the height is sufficient to erect a dome, this style is particularly to be recommended. Panel lighting is also used. This consists of diffusive glass panels set in the ceiling behind which the lamps when properly spaced give a sky-light effect without revealing the source of light. Considerable care must be exercised in the design of panel lighting because as a rule the light is only projected directly down from the panels and wall surfaces cannot be depended on for diffusion to attain general illumination of the interior. When it is used, it is frequently supplemented with wall sconces or cove lighting.

For the auditorium, there are quite a number of lighting systems and combination systems to select from. Direct fixtures, cove lighting or panel lighting combinations of any two or all three may be used.

In cove lighting, the shape of the cove is important. If the cove and dome are too flat, the light will not be projected far enough to the center and in this system of lighting the entire dome surface should be evenly flooded. The cove and reflectors should be properly designed for the purpose. There are domes of such great extent that it is practically impossible to entirely illuminate them from the cove. In such cases, it is necessary to use a fixture to illuminate the surface that cannot be reached by the light in the cove. Preferably, the fixture should be one of indirect type; if semi-indirect is used, care should be taken not too much light is thrown through the bowl, as most of it should be reflected against the surface of the dome. In this particular style of lighting color of the dome and cove surface is a matter of importance. As a rule, light non-absorptive colors are best. Enamel or glazed paint should not be used. A flat paint is absolutely necessary to successful cove lighting. In a great many houses aluminum leaf in various color tints has been used, but not with very much success. It seems almost impossible to do away with direct reflection of metallic surfaces, and the light, instead of being diffused as it would

be over a flat paint surface, is practically mirrored, and each lamp may be seen reflected.

Panel lighting alone should never be used in an auditorium, as this style of illumination does not permit enough light to reach the wall and ceiling surfaces to properly illuminate the decorations. In a number of houses that are exclusively so equipped, it has been found that the effect of the plaster detail on which a great deal of thought and money was expended is entirely lost. Therefore in planning this style of lighting sufficient wall brackets or other light sources should be provided about the auditorium to accentuate the architectural details. Lighting an auditorium with direct fixtures is a familiar method, and requires no comment.

The combination of cove, panel and fixture lighting usually produces a very happy effect. The main ceiling dome may be lighted with coves, some illuminated panels installed in the ceiling, and some also introduced into the soffit of the balcony, with brackets installed throughout the house to help in the general effect. This combination more than any other gives the auditorium a pleasing effect. The quantity of light to be used in both the coves and panels requires very careful study, and should be properly worked out to get good results.

In all of the above descriptions I have assumed that the lighting is that known as "one color lighting." In multi-colored lighting, we have a little different problem. The amount of white light introduced in color lighting should be the same as though white lights only were to be used, and where colors are introduced they should be used in sufficient quantity to blend with the white lights. With the use of dimmers on the stage, effects can be obtained in color lighting by means of various combinations which add materially to the effect of the dome and panels.

The question as to whether color lighting shall be used in a house is one which should receive considerable thought. In a moving picture concert house these effects are used in conjunction with the orchestration, and more or less with tableau on the stage, but it is a question just how much this style may be used in a house giving dramatic productions. They have been used in vaudeville houses which also show pictures, and in that case work out to an extent. The main trouble with color lighting lies with the operator. If there is a good director who will see that the various color combinations are used in conjunction with the music or tableau or for some purpose aside from mere pyrotechnics, color lighting will be successful, but left in the hands of an ordinary stage electrician, who just puts on color here and there at any time that it pleases him without any particular object except a change of color in view, the lighting does not mean anything so far as the production is concerned.

There is one important thing about the auditorium lighting that the architect must bear in mind, and that is emergency lighting. This usually consists of lights on double circuits which are placed on the walls in brackets,

having one circuit controlled from the panel board in the box office, and another circuit controlled from the stage switchboard, the particular object being to light the auditorium sufficiently for a dismissal of an audience in case of accident.

Stage lighting to-day in principle is not very different from what it was years ago when gas was used. There is usually a foot light, a number of borders and certain spots. Formerly all foots and borders were controlled from a gas table which served the purpose a dimmer does to-day. We can now, of course, get effects that were formerly impossible. The footlight serves to throw light backward and upward and the borders throw light downward and backward on the stage. In addition we have pockets for strips and for spot lights for special effects. The stage equipment will vary depending on the character of the house. However, there are generally certain set principles covering the stage lighting which vary as a rule only in quantity. The cheap vaudeville house might have a footlight of simply white lights, and perhaps one or two borders of white lights only. The better class of vaudeville house will have a footlight of three colors with three or four borders, each of three colors, and in addition incandescent pockets either side of the stage, and from two to a half dozen are or spot pockets. An equipment such as this will light the average stage.

The legitimate house, which will take any dramatic production that comes along, can get along on a stage lighting equipment similar to that described for a good vaudeville house, but should be heavier, and adapted to its special demands. Where extravagant productions are given, such as some of the musical comedies, the stage lighting is particularly heavy. A great many shows will require not only incandescent pockets of white only, but incandescent pockets in colors—white, red, blue, or green, or amber—sometimes three colors, sometimes four. They will also require a number of bridge pockets; pockets in the fly gallery, and equipment so that flood lighting can be introduced from the house or auditorium. The concert moving picture house requires a very heavy equipment.

The stage switchboard is practically the heart of the electrical installation. Architects little realize this, and usually provide scant space for it to function in. It seems to be the last consideration, and more is expected from it than from any other single item in the house. The first question usually put to me by an architect is, "How much room will you need for the switchboard?" What he really means to say is, "How little room will you take?" When he is told, he usually begins to bargain. "Can it be put into a smaller space?" is his first question. He does not seem to realize that besides moving switches, the electrician has a great deal to do, and even the moving of switches requires room. In locating a switchboard it must be placed where the electrician can watch almost the entire stage. To get proper effects at the

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(Continued on Page 176.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Machine Shop, Rest and Wash Room. Bridesburg, Philadelphia, \$17,000. Architect, Harry F. Zimmerman, 1208 Harrison street, Frankford, Phila. Owners, Chas. Lennig & Co., Inc., 112 S. Front street, Philadelphia. Hollow tile and timber, 1 story, 60x70 feet, and 1 story, 27x50 feet, slag roofs, stone foundations, hot water heating, electric lighting, rolled steel sash, cement floors, hollow tile, roof ventilators. Plans completed. Owners will build an dars ready for sub-bids on all lines.

Stores and Dwellings (2), alterations to Apartments (6). 1125-27 South Forty-sixth street, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Consists of changing building into apartments. Brick, 3 stories, slate roof, hot water heating, electric lighting and fixtures, tile work, plumbing, hardwood floors, cement work, iron stairs, gas ranges and hot water heating. Owners taking bids. Le Roy K. Smith, Forty-first and Chester avenue; John F. Wolf, 4225 Pennsgrove street; W. J. Irwin, 5927 Kingessing avenue, Philadelphia, and Christian Hansen, East Lansdowne, Pa., are figuring.

Store Building and Rooming House. 1306-08-10 South street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, stone and steel, stone foundations, 3 stories, 42x120 feet, slag roof, steam heating, electric lighting, yellow pine floors, cement work, hollow metal skylights, fire doors, fire tower, flush bulks. Plans in progress. Architect will take bids in two weeks.

Garage. 1225-27 Catherine street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, William Reed, 1238 South Broad street, Philadelphia. Brick and steel, stone foundation, 1 story, 33x40 feet, slag roof, steam heating, electric lighting, hollow metal skylights, cement floors (gasoline storage system reserved). Owner is ready for sub-bids on all lines.

School. Fifty-seventh and Haverford avenue, Philadelphia. Architect, J. Homer Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street. Brick, stone and reinforced concrete, 3 stories and basement, composition roof, cement floors, electric lighting, hollow metal sash, fire and hollow metal doors, ornamental iron work, metal lath, roof ventilators, wire work. Plans about completed. Owners will advertise for bids in about ten days.

Garages (7 cars). Courtland street, near Tenth street, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, 1 story, slag roof, cement floors, electric lighting, hollow metal skylights. Plans completed. Architect will take bids in one week.

Residence (int. and ext. alts.). 2321 North Thirty-third street, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Morris Polin, 1030 Arch

street, Philadelphia. Consists of general interior alterations, mill work, heating, lighting, tile work, etc. Architect taking sub-bids.

Factory. Allegheny avenue and Hancock street, \$7,500. Architect, private plans. Owners, J. B. Keim & Co., Inc., care of Allen R. Mitchell, Sr., president, on premises. Brick, 1 story, 40x50 feet and 40x15 feet, slag roof, maple floors, stone foundations, rolled steel sash and skylights, fire doors (heating, lighting and plumbing reserved). Owners taking bids, due as soon as possible. Wm. J. Grubler & Co., 219 East High street, Germantown, are figuring.

Dwellings (40). Devereaux, Jackson and Gillespie streets, \$114,000. Architects, Milligan & Pierson, 520 Walnut street, Philadelphia. Owners, the Wyoming Const. Co., 1414 South Penn Square, Philadelphia. Brick and stone, 2 stories, 15x43 feet, slag roof, stone foundation, steam heating, combination lighting, hardwood floors. Owners ready to build at once.

Store Building (alts.). 2404-06 North Broad street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Mone Isaacs, Hotel Lorraine, Philadelphia. Brick, stone foundations, cement and pine floors, metal ceilings (steam heating, electric lighting and plumbing reserved), ornamental iron work. Architect taking bids, due March 15th. Albert Zellfelder, 151 South Broad street; D. Henwood, 1509 Wood street, are figuring.

Manufacturing Plant. Buckins and Lefevre streets, Bridesburg, Architect, private plans. Owners, Henry A. Hitter Sons Co., Gaul and Hazard streets, Philadelphia. Frame and frame and concrete, will consist of a group of buildings to be replaced with brick and concrete and steel buildings after the war. Manufacturing and storage plant, 2 stories, 110x500 feet, and manufacturing and repair shops (2), 1 story, 150x80 feet, iron roofs, electric lighting, electric cranes and equipment, cement floors. Owners will build and will take sub-bids.

Residence, alts. to Chapel. 2100 East Ontario street, Philadelphia. Architect, H. G. Hammer, Glenside, Pa. Owners, Italian R. C. Church, care of Rev. Cosmas Bruni, 4330 Paul street, Frankford, Philadelphia. Consists of renovating, new front, mill work, tin roof, repair to floors. Owners and architect have received bids.

Store Building (alts. and add.). 50 South Sixtieth street, Philadelphia. Architect, private plans. Owner, M. Drucker, on premises. Consists of renovation of entire property, 3 stories, addition 2 stories, brick, slag roof, parquet floors, electric lighting, hot water heating, tile and marble work, skylights, flush bulks. Owners have received bids.

Residence (alts. and add.). Roxborough, Philadelphia. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owner's name withheld. Stone, 2½ stories, 20x40 feet,

shingle roof, hardwood floors, warm air heating. Plans completed. Architects will take bids in about one week.

Artillery Firing Range, No. 330. Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Montgomery, Frankford Arsenal, Philadelphia. Reinforced concrete and brick. Proof house, 20x100 feet, 1 story; jolting house, 1 story, 8x8 feet, and powder house, 1 story, 10x10 feet; range, 335 feet, slag, ready roof, steam heating, electric lighting, concrete floors, kalamain doors, waterproofing, ornamental iron work. Owners taking bids, due March 14th at 2 P. M. Wm. R. Dougherty, 1610 Sanson street; W. W. Anstine Co., 1218 Filbert street; Wm. Steele & Sons, 34 South Fifteenth street, and Monaghan & Losse, Inc., 3016 Chestnut street, are figuring.

Residence (alts. and add.). St. Martins, Philadelphia. Architect, private plans. Owner's name withheld. Stone, 3 stories, new plumbing, changing bath rooms, tile work, electric lighting, hot water heating system, new addition, stone, 1 story, 12x14 feet, tin roof. Builder, Wm. J. Grubler & Co., 219 East High street, Germantown, taking sub-bids on all lines.

Dwellings (3). 540-42-46 East Monastery avenue, Philadelphia, \$9,000. Architect, private plans. Owner, John J. Hurley, 4416 Cresson street, Manayunk, Philadelphia. Stone and brick, 2 stories, 15x58 feet, shingle and tin roof, hot water heating, combination lighting, hardwood floors, stone foundations. Owner will build.

Club House (alts. and add.). 1728 South Broad street, Philadelphia. Architects, Milligan & Pierson, 520 Walnut street, Philadelphia. Owners, the Augustine Social and Beneficial Association, care of architects. Brick and stone, new front, 3 stories, slag, tin and canvas roof, maple, pine and composition floors, stone foundations, hot water heating, electric lighting, tile and marble work, metal lath, bar fixtures, ornamental iron work. Architects have received bids.

Building (alt.) to Garage. 1016-18 Spring street, Philadelphia. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owner, C. M. Reber, on premises. Brick, 1 story, 33x90 feet, slag roof, steam heating, electric lighting, cement floors. Owner is taking sub-bids.

Residence, Oak Lane Park, Fairhill street, north of Cheltenham avenue. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owners, Felix & Fedel Cantona, 1720 Cayuga street, Philadelphia. Stone, hollow tile and plaster, 2½ stories, 24x40 feet, tin roof, hot water heating, electric lighting, tile work, yellow pine floors, plumbing. Owners are ready for sub-bids.

Store Building. 1312 Walnut street, Philadelphia. Architects, Hoffman Co., Finance Building, Philadelphia. Owner, Max Dann, care of architects. Consists of new front, in-

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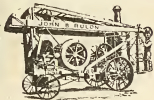
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terior alterations, etc. Architects taking bids, due March 15. Ketchum & McQuade, 1125 Brown street; P. M. Sax, Franklin Bank Building; Basch & Co., 1426 South Front street; F. B. Davis, 240 North Sixteenth street, are figuring.

Residence, Westview and Springbank avenues, Germantown. Architects, Dahring, Okie & Ziegler, Bailey Building, Philadelphia. Owner's name withheld. Stone, 2½ stories, 32x100 feet, shingle roof, stone foundations, hot water heating, electric lighting, tile and marble work. Plans in progress. Architects will take bids in about two weeks.

School Building (Heston), Fifty-fourth and Lansdowne avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street. Brick, stone and reinforced concrete, 3 stories and basement, 95x36 feet, composition roof, cement floors, electric lighting, hollow metal sash, fire and hollow metal doors, ornamental iron work, metal lath, roof ventilators, wore work. Lowest bidders: Wm. R. Dougherty, 1610 Sansom street, \$155,255; Standard Const. Co., 1713 Sansom street, \$158,800.

School Building (alts.), Pine and Quince streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut streets. Brick, mill work, plastering. Lowest bids submitted by:

Mitchell Bros., 2125 Race street, \$2,559; J. M. Jordan, Thirty-first and Oxford streets, \$2,700.

Dispensary and Administration Buildings, Seventh street, between Delancey and Cypress streets, Philadelphia. Architects, Dahring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babies' Hospital of Philadelphia, care of Mr. Davidson, 1713 Walnut street, Philadelphia. Brick, stone and steel, 4 stories, and 2 stories and basement. Plans completed. Architects ready for approximate bids.

Residence (int. alts.), 15-17 West Upsal street, Germantown. Architect, Geo. I. Lovatt, 416 Walnut street, Philadelphia. Owner, M. H. Lee, 17 West Upsal street, Germantown. Stone, brick work, mill work, plastering, tile work, hardwood floors. Architects taking bids,

due March 22nd. Stacy Reeves & Son, 2011 Market street; Chas. McCaul Co., 1713 Sansom street; F. B. Davis, 2440 North Sixteenth street; Alan G. Smith, 2135 North Sixty-third street, and McClinton & Weaver, 24 Philadelphia street, are figuring.

Garages (7), Courtland street, near Tenth street, Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Chas. A. Mahon, Norwood street and Chelton avenue, Philadelphia. Brick, 2 buildings, 1 story, slag roof, cement floors, electric lighting, hollow metal skylights. Owner is ready for sub-bids.

Shelter Shed, Government avenue and South Broad street, \$12,000. Architect, private plans. Owners, P. R. T. Co., 810 Dauphin street, Philadelphia. Brick, 15 feet high, 30x140 feet, slag roof. Owners will build.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Boat Shop (add.) and Building No. 10 (extension), Spec. No. 2806, Navy Yard, League Island, Philadelphia, \$250,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel, concrete and terra cotta, 2 stories, 120x39 feet, and 1 story, 101x340 feet, slate and composition roof, steam heat, electric lighting, marble work, rolled steel sash, fire doors, fire escapes, cement floors. Contract awarded to Thos. Reilly, 1616 Thompson street, Philadelphia.

Residence and Garage, Queen Lane Station, Germantown. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owner, Mrs. Stanley Marvel, 5915 Pulaski avenue, Germantown. Brick and frame and stone, 2½ stories, 28x50 feet, and 1 story, 19x13 feet, slate roof, hot water heating, electric lighting, tile and marble work, pine, oak and concrete floors, stone foundations. Contract awarded to Hogg Const. Co., 1634 Sansom street, Philadelphia.

Power House and Boiler Room, 2626-56 Martha street, \$6,500. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owners, L. M. Leberman Sons, Inc., on premises. Brick, slow burning construction, 1 story, 58x29 feet, slag roof, electric lighting, cement floors, hollow metal sash and skylights. Contract awarded to Conneen Const. Co., 1737 Filbert street, Philadelphia.

Pipe Shed, 911 North Ninth Ninth street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Keystone Supply and Manufacturing Co., on premises. Corrugated iron and steel, 1 story, 50x80 feet, slag roof, cement floor. Contract awarded

to Smith-Hardiean Co., 1606 Cherry street, Philadelphia.

Garage, 2311 North Broad street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, L. W. Hirsch, 3639 North Fifteenth street, Philadelphia. Brick, 1 story, 22x24 feet, slag roof, steam heating, electric lighting, cement floors. Contract awarded to Daniel J. McNamee, 1621 North Fifteenth street, Philadelphia.

Bakery (fire repairs), Twenty-third and Master streets, Philadelphia, \$8,500. Architect, private plans. Owners, Freihofer Baking Co., Twentieth and Indiana avenue, Philadelphia. General fire repairs, mill work, 3 stories, 99x87 feet, roof repairs, etc. Contract awarded to P. Haibach Const. Co., Twenty-sixth and Thompson streets, Philadelphia.

Oil House, Pipe Rack and Locomotive Shop, Tacony, Philadelphia. Architect, private plans. Owners, Tacony Ordnance Corp., Tacony, Philadelphia. Iron and wood, 1 story, 17x23 feet, 85x35 feet and 24x23 feet. Ready roof, roof ventilators, wire work. Contract awarded to M. Moister Co., 3931 North Fifth street, Philadelphia.

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PENNSYLVANIA Construction News

Office Building (add.), South Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., care of Mr. Tobias, P. A., South Bethlehem, Pa. Brick and steel, 9 stories, 155x99 feet, slag and concrete roof, vapor heating, electric lighting, fire doors, metal lath, 3 elevators, fire escapes and iron stairs. Plans in progress.

Paragonaw, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, J. H. Boyer, Bethlehem Trust Building, Bethlehem, Pa. Brick and stucco, 2 stories, 32x45 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Plans in progress.

Twin Houses (6), Tenth and Spring streets, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, J. S. Moyer, Bethlehem Trust Building, Bethlehem, Pa. Brick, 2½ stories, 30x45 feet, slate roof, steam or hot water heating, electric lighting. Plans in progress.

Residence, Fourth and Wyndotte streets, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, Dr. Chas. H. Wilkinson, Bethlehem, Pa. Stucco, 2½ stories, 32x28 feet, slate roof, pine floors, tile work, combination lighting, hot water heating. Plans in progress. Architect will take bids in a few days.

Apartment Building (alt. and add.), Bethlehem Annex, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, John Sallash, R. F. D. No. 3, Easton, Pa. Brick, 4 stories, 43x90 feet, general interior alterations, plumbing, electric lighting, mill work, plastering. Owner taking bids.

Women's Welfare Building, South Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., care of Mr. Tobias, South Bethlehem, Pa. Brick and steel, 2 stories, 60x65 feet, J-M roof, pine floors, steam heating, electric lighting. Owners taking sub-bids.

Apartment House (alt. and add.), South Bethlehem, Pa., \$10,000. Architect, David Levy, Allentown, Pa. Owner's name withheld. Brick, 3 stories, 37x140 feet, electric lighting, steam heating, yellow pine floors, mill work, plastering, plumbing. Plans completed. Architect taking sub-bids.

Residences (10), Allentown, Pa. Architect, private plans. Owner, Joseph Carrone, 110 N. Penn street, Allentown, Pa. Brick, 2 stories, Spanish tile roof, electric lighting, tile work, heating undecided, pine floors. Owners taking sub-bids.

Operation of Residences (about 100), Norwood and Chester, Pa. Architect, private plans. Owners, Bricker & Co., 117 South Forty-first street, Philadelphia. Brick and plaster, or brick and frame, 2 stories (6 rooms and bath), single pipe hot air heating, yellow pine floors, artificial tile work, lighting undecided. Owners ready for sub-bids on all lines.

Band Hall, 805 Buttonwood street, South Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, First Hungarian Band, care of architect. Frame, 1 story, 50x70 feet, rubberoid roof, maple floors. Plans in progress.

House and Tower and Outbuilding, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care of Lighthouse Inspector, Room 427, P. O. Building, Philadelphia. Brick, 2½ stories, 24x32 feet, and 1 story, 18x22 feet, slate and concrete roofs, concrete and pine floors, iron stairs, limestone trim; tower, 12x12 feet. Owners taking bids, due March 14th. Wm. Linker Co., 831 Cherry street; James H. Wells, Otis Building, Philadelphia, and A. S. Reed & Bro. Co., 815 Shipley street, Wilmington, Del., additional bidders.

Operation of Residences, Coatesville, Pa. Architect, Harry G. McMurtrie, 1012 Walnut street, Philadelphia. Owner, Benj. Aronsohn, Coatesville, Pa. Brick, 2 stories, slate or slag roof. Plans in progress. Too early for details.

Cottages (2), Glen Loch, Pa. Architects, Zantzing, Borie & Medary, Otis Building, Philadelphia. Owners, Church Farm School, Glen Loch, Pa. Stone, 2 stories, shingle roof, hot air heating, electric lighting, yellow pine floors. Architects taking approximate bids. E. R. Hall, 34 South Seventeenth street, Philadelphia, is figuring.

Residence (alts.) to Apartments, Lansdowne avenue, Lansdowne, Pa. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owner's name withheld. Frame, 3 stories, 20x20 feet, tin roof, hot water heating, electric lighting, tile work, pine and hardwood floors. Architects taking bids, due March 20th. Tyas & Co., J. Howard Roberts, and Geo. W. Riley, all of Lansdowne, Pa., are figuring.

Residence (alt. and add.), Lancaster Road and Sycamore avenue, Merion, Pa. Architects, Seeburger & Rubenold, Pennsylvania Building, Philadelphia. Owner, Kiwa Schwartz, on premises. Brick and plaster, 2½ stories, new two-story portico, brick and plaster, shingle roof. Plans in progress. Architects will take bids in a few days.

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Infirmity Building "S" and Tunnel to "K" Building, Spring City, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institute for Feeble Minded Women of Eastern Pennsylvania, Spring City, Pa. Brick, stone and steel, 2 stories, 18x20 feet and 80x40 feet, tunnel 225 feet long, slag and slate roof, granolithic floors, steam heating, electric lighting, hollow tile, metal lath, elevators, metal weatherstrips, dampproofing, wire work, marble and terrazzo work, hollow metal and rolled steel sash and skylights, fire doors, iron stairs, ornamental iron work. Lowest bids submitted by: Wm. H. Jones, West Chester, Pa., \$114,000 and \$34,000, irregular; F. H. Kaiser, Pottstown, \$148,497, alternate, \$119,543; W. H. Wiand, Pottstown, \$149,977, alternate, \$118,400; Pringle Borthwick, 8018 Germantown avenue, \$167,810, alternate, \$120,354; Wark-Yardley Co., 1737 Filbert street, \$169,000, alternate, \$137,250.

Church, Forest City, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, St. Agnes' R. C. Church, care of Rev. M. F. Manley, Forest City, Pa. Frame, 1 story and basement, 40x120 feet, slate roof, steam heating, electric lighting, pine floors. Plans completed. Architect ready for bids.

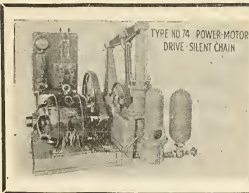
Orphanage, Nanticoke, Pa. Architects, Morris & MacHale, Burr Building, Scranton, Pa. Owners, St. Stanislaus' Orphanage, care of architect. Hollow tile and stucco, 2 stories and basement, 130x120 feet, tile roof (steam heating, plumbing and electric work reserved), tile work, hardwood and composition floors,

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hollow tile, metal lath, fire towers, hollow metal skylights, safety treads, iron stairs. Architects taking bids, due March 26th. Hogen Lumber Co., Howard & Stender, and Peter Stipp, all of Scranton, Pa., and the Shomakin Lumber Co., Shamokin, Pa., are figuring.

Store (alts.), 427 Lackawanna avenue, Scranton, Pa. Architect, Lewis Hancock, Jr., Mears Building, Scranton, Pa. Owner's name withheld. Consists of general interior alterations, 1 story, carpenter work, tile and marble work, hollow metal sash. Architect taking bids, due as soon as possible. Washburn & Williams Co., and Hower & Stender, both of Scranton, Pa., are figuring.

Residence, Dunmore, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owner, M. J. Dempsey, Dunmore, Pa. Frame or stucco, 2½ stories, 32x38 feet, slate roof, steam heating, electric lighting, pine floors. Plans completed. Architect ready for bids.

Hotel (alts.), Penn avenue and East Market street, Wilkes-Barre, Pa. Architect, George Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owners, Hotel Hart, Wilkes-Barre, Pa. Consists of general interior alterations, 1

story, steam heating, electric lighting, tile work, metal lath and ceilings. Architect taking bids, due as soon as possible. Walborn & Barney, O. J. Behrens, Wilson J. Smith, and A. M. Hildebrand, all of Wilkes-Barre, Pa., are figuring.

Store and Flat, Old Forge, Pa. Architect, L. P. Turon, Pittston, Pa. Owner, Ciriaeo Dandrea, Old Forge, Pa. Frame, 2 stories. Plans in progress.

Laundry, Blakely, Pa. Architect, E. H. Davis, Union Bank Building, Blakely Poor District, Blakely, Pa. Brick, fireproof construction, 2 stories, 30x75 feet, slate roof, electric lighting, rolled steel sash, concrete floors. Plans in progress.

Residence, near Shenandoah, Pa. Architect, George Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, T. M. Dodson, Bethlehem, Pa. Frame, 1 story, 58x50 feet, pine floors, steam heating, electric lighting, plumbing, roof undecided. Plans in progress.

Theatre (alts.), Freeland, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Freeland Opera House, Freeland, Pa. Consists of general interior alterations, painting, plastering, carpenter work, reinforcing floors. Plans completed.

PENNSYLVANIA

Contracts Awarded

Building, Scranton, Pa. Architect, E. H. Davis, Union Bank Building, Scranton, Pa. Owners, Michael Bosak Co., Scranton, Pa. Brick, fireproof, 2 stories, 32x30 feet, slag roof, concrete floors, electric lighting. Contract awarded to S. Palumbo, Scranton, Pa.

Store (alts.), 70 South Main street, Wilkes-Barre, Pa. Architect, private plans. Owners, Landau Music and Jewelry Store, on premises. Consists of general interior alterations, 3 stories, carpentry, concrete floors, electric lighting (store fixtures reserved). Contract awarded to Schmitt & Co., Wilkes-Barre, Pa.

Apartments, Allentown, Pa. Architect, H. J. Weigner, Bethlehem, Pa. Owner, George

Fisher, Allentown, Pa. Consists of general interior alterations, 3 stories, 75x17 feet, slag roof, electric lighting. Contract awarded to Butz & Clader, Allentown, Pa.

Store Building (alts.), Meadowbrook, Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owner, Edw. C. Marshall, Rydal, Pa. Stone, 2 stories, interior alterations, new dining room, bath room, etc., tin roof, hardwood floors, steam heating, electric lighting, tile and marble work. Contract awarded to Howard S. Amey, Ambler, Pa.

Residence and Garage, Seventh and Fayette streets, Conshohocken, Pa., \$56,000. Architect, Ernest H. Yardley, 1713 Sansom street, Phila-

delphia. Owner, Edwin W. Harrison, Real Estate Trust Building, Philadelphia. Stone and brick, 2½ stories and basement, 61x70 feet, and 2 stories, 45x30 feet, slate roof, stone foundations, hot water heating, electric lighting, tile and marble work, cement and oak floors, metal lath, dampproofing. Contract awarded to A. L. Fretz & Son, Heed Building, Philadelphia.

Residence, Hazleton, Pa. Architect, George F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, T. J. Dalton, Hazleton, Pa. Frame, 2½ stories, 28x55 feet, oak and tile floors, hot water heating, electric lighting, tile work. Contract awarded to H. Campbell, Hazleton, Pa.

Store Building (alts.), Wilkes-Barre, Pa. Architect, George F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. K. Weitzenkorn, Wilkes-Barre, Pa. Brick, 3 stories, general interior alterations, mill work, new stairs, marble work, flush bulks. Contract awarded to Walborn & Barney, Wilkes-Barre, Pa.

State Hospital (add.), Nanticoke, Pa. Architects, McCormick & French, Dime Bank Building, Wilkes-Barre, Pa. Owners, State Hospital of Nanticoke, Nanticoke, Pa. Brick, 2 stories, 60x90 feet and 30x60 feet, asphalt roof, tile floors (steam heating, electric lighting and plumbing reserved), hollow metal sash and skylights, metal lath. Contract awarded to Curtis & Co., Wilkes-Barre, Pa.

Store Building, East Market street, Wilkes-Barre, Pa. Architect, George Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. K. Weitzenkorn, Wilkes-Barre, Pa. Brick, 3 stories, 31x65 feet, slag roof, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal skylights, pine floors, metal lath, roof ventilators, metal ceilings, damp-proofing, iron stairs. Contract awarded to Walborn & Barney, Wilkes-Barre, Pa.

Toilet Rooms (2), Wilkes-Barre, Pa. Architects, McCormick & French, Dime Bank Building, Wilkes-Barre, Pa. Owners, Vulcan Iron Works, care of Mr. Jackson, Wilkes-Barre, Pa. Brick, 1 story, 20x28 feet, slate roof, concrete floors, electric lighting, tile and marble work. Contract awarded to Curtis & Co., Wilkes-Barre, Pa.

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New Jersey Construction News

Hotel and Garage. Connecticut avenue and Boardwalk, Atlantic City, N. J., \$250,000. Architect, private plans. Owner, M. Grossman, South New Jersey avenue, Atlantic City, N. J. Brick, 5 stories, 175x80 feet, terra cotta trim, concrete and pile foundations, composition roof (high pressure steam heating, electric lighting, refrigerating system, power plant, elevators reserved), marble work, tile and maple floors, metal bath, mill work, safety treads, roof ventilators, fire escapes, damp-proofing, ornamental iron work. Owner, care of L. W. Levin, 2434 S. Eighth street, Philadelphia, is taking sub-bids and general bids, due as soon as possible. N. Baidman, 5944 Walnut street, Philadelphia, and P. G. Hanum, Atlantic City, N. J., are figuring.

Office Building (alts.), Burlington, N. J. Architect, private plans. Owners, the Delaware and Atlantic Telegraph and Telephone Co., care of Bell Telephone Co., Seventeenth and Arch streets, Philadelphia. Brick, 2 stories, 95x20 feet, slag roof, hot water heating, electric lighting, cement and pine floors, ornamental iron work. Owners taking bids, due March 15th at 9 A. M. E. R. Hall, 34 South Seventeenth street; F. L. Hoover & Son, 1023 Cherry street; Albert Zellfelder, 151 South Broad street, and P. A. Havens Co., 845 N. Nineteenth street, Philadelphia, are figuring.

Office and Warehouse, 1514 Federal street, Camden, N. J. Architect, private plans. Owner, Ellwood Antrim, Camden, N. J. Brick and iron, 2 stories, 60x40 feet, slag roof, hot air heating, electric lighting, pine floors, fire doors, elevators. Owners are sub-letting.

Laundry Building and Boiler House, Trenton, N. J. Architect, Wm. Kleeman, Trenton, N. J. Owner, City of Trenton, Department of Public Affairs, care of Mayor Donnelly, Trenton, N. J. Brick, 2 stories, 50x50 feet, slate roof, concrete floors, steam heating, electric lighting. Plans about completed. Owners will advertise for bids in about one week.

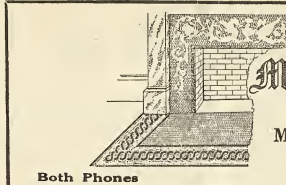
School (alts.), Milford, N. J., \$14,000. Architect, Harry Hill, State street, Trenton, N. J. Owners, School Board of Milford, Frank P. Vanderbilt, secretary, Milford, N. J. Consists of general interior alterations, 2 stories, steam heating remodeling, electric lighting, iron stairs. Plans in progress.

Stable, New Lisbon, N. J., \$5,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State of New Jersey, care of State Colony, New Lisbon, N. J. Frame, 2 stories, 32x56 feet, shingle roof, pine floors. Plans in progress.

Shop Building, New Lisbon, N. J., \$2,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, State of New Jersey, care of State Colony, New Lisbon, N. J. Frame, 1 story, 28x56 feet, shingle roof, pine floors. Plans in progress.

Residence, Titusville, N. J. Architect, Harry Hill, State street, Trenton, N. J. Owner, Dr. Chas. H. Dils, Broad Street Bank Building, Trenton, N. J. Frame, 2 stories, 38x50 feet, shingle roof, vacuum heating, electric lighting, pine floors, stone foundations. Architect will be ready for bids in a few days.

Schools (3) (alts. and adds.), New Brunswick, N. J. Architect, Alex. Merchant, 363 George street, New Brunswick, N. J. Owners, Board of Education, New Brunswick, N. J. Reinforced concrete, brick and stone, 1, 2 and 3 story addition, slag and slate roofs, cement and pine floors, tile work, metal bath, ornamental iron work, composition treads, kal-



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main doors, roof ventilators, metal window guards, waterproofing, weatherstrips (heating, plumbing and lighting reserved). Lowest bids

submitted by the Matthews Const. Co., Princeton, N. J. Hale School, \$35,375; Washington School, \$28,793; Lincoln School, \$80,567.

NEW JERSEY

Contracts Awarded

Fish Freezer and Cold Storage House, Seaside Heights, N. J., \$80,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Barnegat Ice Manufacturing Co., Seaside Heights, N. J. Frame, 4 stories, 75x100 feet, rubberoid roof, asphalt and cork floors, electric lighting, electric elevators. Contract awarded to F. R. Sykes, Seaside Heights, N. J.

Storehouse, Trenton, N. J., \$10,000. Architect, Wm. J. Clark, 836 Michigan avenue, Chicago, Ill. Owners, Crane Co., Chicago, Ill. Brick and concrete, 3 stories, 65x40 feet, slag

roof, wood floors (heating, plumbing and electric work reserved). Contract for masonry awarded to Chas. J. Smith, Trenton, N. J. General contract awarded to Chas. Randall, Trenton, N. J.

Residence, Charleston, N. J. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, Earl Blyer, Charleston, N. J. Frame and plaster, 2½ stories, 25x30 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Contract awarded to Hugh B. Miller, Edgewater Park, N. J.

DELAWARE

Construction News

Stores and Apartments (alts. and add.), 403-05 Delaware avenue, Wilmington, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, Stephen L. McKee, on premises. Brick, 3 stories, general interior alterations, pine floors, electric lighting, plastering, flush bulks. Architect taking bids, due as soon as possible. Charles Dougherty, W. D. Haddock & Co., and Chas. Bryce, all of Wilmington, Del., are figuring.

Bungalow, Cragmere, Wilmington, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, David Masters, 2001 Boulevard, Wilmington, Del. Brick and hollow tile, 1½ stories, 25x40 feet, shingle roof, electric lighting, hardwood floors, heating undecided. Architect taking bids. Gustav Ly-sander, Chas. J. Dougherty, W. D. Haddock & Co., H. P. Carlon, and Chas. Bryce, all of Wilmington, Del., are figuring.

Apartment House, Wilmington, Del. Archi-

tect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Gidel Podalsky, Seventh and Washington streets, Wilmington, Del. Brick, 3 stories (9 apartments), tin roof, hot water heating, electric lighting, tile work, pine floors. Architect taking bids, due March 14th. W. D. Haddock & Co., John E. Healy & Son, Joyce & Kerrigan, and C. J. Dougherty, all of Wilmington, Del., are figuring.

Residences (4), Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Gidel Podalsky, Seventh and Washington streets, Wilmington, Del. Brick, 2½ stories, (2) 16x55 feet and (2) 24x35 feet, composition roof, hot water heating, combination lighting, tile work, hardwood and yellow pine floors. Architect taking bids, due March 14th. W. D. Haddock & Co., John E. Healy & Son, Joyce & Kerrigan, and C. J. Dougherty, all of Wilmington, Del., are figuring.

Store Building, Sixth and King streets, Wil-

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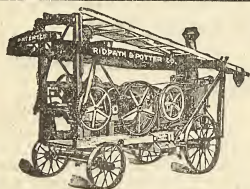
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mington, Del., \$25,000. Architects, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, McMahon Bros., on premises. Brick, slow burning, 4 stories, 60x85 feet, slag roof, steam heating, electric lighting, hollow metal sash and skylights, metal bulks, fire escapes, iron stairs, pine floors, metal lath, hollow tile, elevators. Architect has received bids.

Evaporating Room, Wilmington, Del. Architect, R. C. Tindall, Wilmington, Del. Owners, American Vulcanized Fibre Co., Wilmington, Del. Brick, 1 story, 40x60 feet, concrete

floors. Architect is taking bids.

Residences (100), Green and Pennsylvania avenue, Wilmington, Del. Architect, Edw. L. Palmer, Jr., 513 North Charles street, Baltimore, Md. Owners, E. I. duPont de Nemours & Co., Wilmington, Del. Brick or stone foundations, hollow tile and stucco, 2½ stories, hot water and hot air heating, slate roofs, combination lighting, hardwood floors, tile work, waterproofing, plastering, painting and plumbing. Contract awarded to H. D. Watts, Garrett Building, Baltimore, Md.

MARYLAND

Construction News

Garage (add.), York Road and Arlington avenue, Baltimore, Md. Architect, private plans. Owners, Guilford Motor Co., on premises. Brick, 1 story, 100x200 feet, slag roof, steel and iron, hollow metal skylights, plumbing, painting. Plans in progress. McLean Cont. Co., 1412 Fidelity Building, Baltimore, will take sub-bids.

Garage, Elliott street, near Decker street, Baltimore, Md. Architect, private plans. Owner, Joseph J. Siemek, 3020 Elliott street, Baltimore, Md. Brick, 1 story, 20x70 feet, slag roof, electric lighting, hollow metal skylights, plumbin, painting. Owner will take bids in about one week.

Store and Warehouse, 401-03 West Pratt street and 200-204 South Eutaw street, Baltimore, Md. Architect, private plans. Owner, Charles Newman, 330 West Pratt street, Baltimore, Md. Brick, 2 stories. Plans in progress. Too early for details.

Building (alts. and add.), 302 West Biddle street, Baltimore, Md. Architect, George R. Callis, Knickerbocker Building, Baltimore, Md. Owners, Morrow & Adler, on premises. Brick, 14x40 feet, interior alterations, steam heating, electric lighting, hollow metal skylights, ven-

tilators, tile, marble and terrazzo work. Plans in progress.

Dwellings (7), 2134-40 North Guilford avenue, Baltimore, Md. Architect, Jacob W. Gerwig, Equitable Building, Baltimore, Md. Owner, Edw. J. Storek, Munsey Building, Baltimore, Md. Brick, 2 stories, 25x35 feet, tin or slag roof, hot water heating, electric lighting, gas lighting, skylights, tile work, plumbing. Owner will build and is ready for sub-bids.

Garage, Fremont and Mulberry streets, Baltimore, Md. Architect, George R. Callis, Jr., Knickerbocker Building, Baltimore, Md. Owners, A. Schumann & Co., 423 West Pratt street, Baltimore, Md. Brick and steel, slow burning construction, 1 story, 69x82 feet, slag roof, steam heating, electric lighting, skylights, plumbing, painting, plastering. Plans in progress.

Garage, 37-41 West Cross street, Baltimore, Md. Architects, Callis & Callis, 2055 Kennedy avenue, Baltimore, Md. Owner, Samuel 2036 Brookfield avenue, Baltimore, Md. Brick and steel, slow burning construction, 1 story, 50x160 feet, slag roof, steam heating, electric lighting, skylights, ventilators, plumbing. Plans completed. Architect ready for bids.

Residence and Garage, Liberty Heights avenue, Baltimore, Md. Architects, Smith & May, Calvert Building, Baltimore, Md. Owner, Park School, on premises. Frame and stucco, 1 and 2 stories, asbestos shingle roof, steam heating, electric lighting, skylights, plastering, painting, plumbing, interior tile work. Plans in progress.

Lunch Room (alts.), York Road car barn, Baltimore, Md. Architect, private plans. Owners, United Electric Railways Co., Continental Building, Baltimore, Md. Consists of interior alterations, electric lighting, ventilators, fireproofing, plastering, painting, tile work, refrigerator. Owners taking bids, due March 18th. Singer-Pentz Co., Hicks, Tase & Norris, C. E. Stubbs, H. T. Sorrell & Son, all of Baltimore, Md., are figuring.

Maryland

Contracts Awarded

Building (add.), Greenmount avenue and Oliver street, Baltimore, Md., \$3,000. Architect, private plans. Owners, Lord Baltimore Press, on premises. Brick and concrete, 1 story, 9x43 feet, slag roof, steel and iron work, galvanized iron work, plastering, painting. Contract awarded to R. H. Frazier & Son, 224 West Mulberry street, Baltimore, Md.

Abattoir and Cold Storage, Tank House, Power House and Garage, Sixth street, south of Wilkens avenue, Baltimore, Md. Architects, Gardner & Lindberg, Marquette Building, Chicago, Ill. Owners, Corkran, Hill & Co., 221-7 South Howard street, Baltimore, Md. Brick, steel, concrete and stone, 3 stories, 90x220 feet, composition roof, electric lighting, electric elevators, ornamental iron work, direct and indirect heating system, fire escapes, steel sash, metal doors, skylights, ventilators, hollow tile, metal lath, plumbing, plastering, painting. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore, Md.

Base Hospital No. 7, Garrett Tract, between York Road and Charles Street avenue, Baltimore, Md. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Will consist of 7 buildings, including hospital buildings, officers' quarters and dormitories, office building, garage, grading roads, etc. Contract awarded to Roland Park Co., Roland Park, Baltimore, Md.

Red Cross Building, Camp Meade, Md. Architect, private plans. Owners, Red Cross Association, care of Charles E. Ferrin, Camp Meade, Md. Frame, 2½ stories, composition roof, steam heating, electric lighting, plastering, painting, plumbing, interior tile work. Contract awarded to Whitty Co., Union Trust Building, Washington, D. C.

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Philadelphia

Garage, 1005 North Sixty-fourth street, \$900. Moss & Taylor (O and C), 560 North Fifty-eighth street. Stone, 1 story, 14x20 feet, slag roof.

Shed, Thirty-first and Chestnut streets, \$4,000. Bridgman Bros. Co. (O), 131 South Third-first street. John Borden & Bro. (C), 637 North Nineteenth street. Open shed, 57x134 feet, reinforced concrete and composition roof.

Power House, 2626 Martha street, \$6,450. S. A. & M. A. Leberman (O), 2626 Martha street. Conneen Const. Co. (C), 1737 Filbert street. Brick, 1 story, 29x38 feet, slag roof.

Garage, Fifty-seventh and Beaumont avenue, \$2,200. Walter Wallace (O), 1327 North Fifty-seventh street. Davis & Chypton (C), 1317-19 North Twentieth street. Brick, 2 stories, 107 x44 feet, slag roof.

Garage, Nixon and Fountain streets, \$1,000. Martin & Wm. H. Nixon Paper Co., Manyunk, Pa. (O and C). Iron on iron, 1 story, 16x30 feet.

Dwellings (3), 540-42-46 East Monastery avenue, \$9,000. John J. Hurley (O and C), 4416 Cresson street, Manyunk. Stone and brick, 2 stories, 15x48 feet, shingle and tin roof, hot water heating.

Garage, 1921 Clementine street, \$1,500. H. S. Troxell (O), Allegheny and Kensington avenues. F. Crompton & Bro. (C), 4614 Oakland street. Brick, 1 story, 16x55 feet, stone foundations, slag roof.

Garage, 6100 Hegerman street, \$1,200. J. G. Trost (O), 6102 Hegerman street. Frank Deitrick, Jr. (C), 1828 East Schiller street. Brick, 1 story, 16x32 feet, stone foundation, slag roof, cement floor.

Dwellings (40), Deveran and Jackson and Gillespie and McKinley streets, \$114,000. The Wyoming Const. Co. (O and C), 1414 South Penn Square. Stone and brick, 2 stories, 15x43 feet, slag roof, steam heating, stone foundations.

Garage and Show Room, 1712-14 Race street, \$40,000. H. M. Brown (O), Broad and Walnut streets. Albert Zellfelder (C), Broad and Walnut streets. Brick, 1 story, 38x128 feet.

Church, Twenty-seventh and Hageret streets, \$20,000. North Penn Baptist Church (O), on premises. J. F. Trent (C), 2041 Master street. Stone, second story built on basement, 50x55 feet, slate roof, steam heating.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, Fifty-fourth and Delancey streets, \$750. John Armstrong (O), on premises. Ed. Holland (C), Upper Darby, Pa. Brick, 1 story, 10x20 feet, slag roof.

Boiler Room, Howard and Palmer streets, \$900. Martin Stotz (O), Land Title Building. Harry Kuehlein (C), 2046 Trenton avenue. Alteration.

Club and Gymnasium, 1520 North Sydenham street, \$3,000. Clarence Wolf (O), 1521 North Sixteenth street. P. M. Sax (C), 1205 Franklin Bank Building. Interior alterations.

Dwelling, 2101 Olney avenue, \$600. Dr. Leon Van Horn (O), on premises. A. L. Plush (C), 1602 Market street. Fire escape.

Rectory, Broad and Butler streets, \$5,000. St. Stephen's R. C. Church (O), on premises. Henry P. Schneider (C), 3713 York Road. Brick, 1 story, 15x50 feet, and alterations.

Factory, 2009 North street, \$5,800. Shama-hand & Elliott Ice Cream Co. (O), on premises. D. E. Page Co. (C), 2622 Parrish street. Alteration to floors, concrete piers, cork insulation.

Dwelling, 152 North Fifteenth street, \$2,000. The Monthly Meeting of Friends of Philadelphia (O), on premises. Smith-Hardican Co. (C), 1606 Cherry street. New front doorway and alterations.

Dwelling, Seventeenth and Monument avenue, \$355. Rev. J. E. Adamson (O), 1063 N. Sixty-third street. Smith-Hardican Co. (C), 1606 Cherry street. Repair brick wall.

Dyeing and Scouring, 5904 Germantown avenue, \$2,800. J. Herzog Co. (O), on premises.

Wm. C. Wright (C), 22 Harvey street. Brick, 2 stories, 16x31 feet, slag roof.

Dwelling, 421 South Fifty-seventh street, \$400. H. C. Cramer (O), on premises. J. D. Fisher (C), 5424 Thompson street. Alterations.

Store and Dwelling, 507 South street, \$1,660. Charles L. Brown & Co. (O), 217 South Broad street. James A. Fitzgerald Sons (C), 1623 Snyder avenue. Repair fire damage.

Dwelling, 85 Bethlehem Pike, \$800. M. B. Hamilton (O), 5825 Wayne avenue, Germantown. Alex Carl (C), 48 East Chestnut avenue, Chestnut Hill. Interior alterations.

Mill, Thirds and Cumberland streets, \$3,100. Wm. Ayers & Sons Co. (O), on premises. Chas. McCaul Co. (C), 1713 Sansom street. Bridge to connect two buildings, galvanized iron sides and roof, cement floor, fire doors.

Dwelling, 5001 Cedar avenue, \$2,400. C. Frederick Pfander (O), on premises. Ed. Fay & Son (C), 2 Mole street. Brick, 1 story, 21x23 feet, slag roof.

Store, Philip and Shunk streets, \$400. C. Lapateen (O), on premises. S. Lastiner (C), 1700 South Fifth street. Alterations.

Garage, 349 North Fifty-seventh street, \$500. Richards Kelly Co. (O), 349 North Fifty-seventh street. Webster Cont. Co. (C), 3522 Haverford Road. Brick, 1 story, 15x24 feet, stone foundation, slag roof.

Dwelling, 1409 South Clarion street, \$500. Donato Dulise (O and C), on premises. Brick, 2 stories, 11x10 feet, slag roof.

Dwelling, Jackson and Linden avenue, \$700.

Otto Fisher (O), on premises. A. W. J. Williams (C), 3010 Linden avenue. Frame, 2 stories, 16x12 feet.

Store and Dwelling, Gaul and Berks streets, \$1,500. Owen Maguire (O), 1626 East Berks street. D. W. O'Dea (C), 5227 North Fifth street. Change front and interior alterations.

Store and Dwelling, Seventy-fifth and Boist avenue, \$900. Mayer Seullysman (O), on premises. James Warner (C), 7812 Cheldwyn avenue. Brick, 2 stories, 13x16 feet, slag roof, addition.

Garage, 330 North Edgewood street, \$800. James Ivers (O), Sixty-first and Market streets. J. H. Hutt (C), 5919 Spruce street. Brick, 1 story, 19x22 feet, slag roof.

Dwellings (2), 501-03 South Twenty-seventh street, \$400. David Rothstein (O and C), 622 Poplar street. Alterations.

Dwelling, 2803 North Twenty-sixth street, \$300. Dr. S. Brown (O), on premises. B. Kaplan (C), 6140 Pine street. Brick, 1 story, 9x10 feet, kitchen addition.

Shop, 111 North Fourth street, \$800. Sol Solwinski (O), 311 Race street. A. S. Sche-stack (C), 528 Reed street. Fire repairs.

Garage, Bustleton and Robbins street, \$300. A. Peoples (O and C), Twenty-fifth and Cal-lowhill streets. Stone addition, 20x18 feet, 1 story, slag roof.

Bank, Frankford, Overington, \$4,000. Oxford Bank of Frankford, on premises. Sam D. Milner (C), 916 Crozer Building. New window frames and alterations for bank.

Paint Shop, 1028 East Susquehanna avenue, \$1,000. Daniel Dwyer (O), on premises. Ed. Eagle (C), 1239 East Nevada street. Brick, 1 story, 22x35 feet, stone foundation, slag roof.

Store and Dwelling, Master and Hutchinson streets, \$300. Purity Candy Co. (O), 922 Master street. J. Kumel (C), 2840 Stiles street. Brick, 1 story, 10x10 feet.

Dwelling, Park and Montgomery avenue, \$400. Julia E. Scott (O), 1800 Park avenue. Thomas Matthews & Son (C), 2336 North Nancecock street. Alterations.

Store and Dwelling, Clarissa and Bristol streets, \$700. Carl Sudof (O), on premises. Harry H. Yeger (C), 4430 North Nineteenth street. Alterations.

Restaurant, Government avenue, east of Broad street, \$800. Anna M. Downs (O), 1418 Wolf street. Fred Klein (C), 2318 South Fifteenth street. Frame, 1 story, 34x63 feet, move it back 100 feet.

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THEATRE ILLUMINATION.

(Continued from Page 166.)

right time he must be able to watch for his cues. The slightest mistake in this direction will mar any show. Besides this, the architect must not forget that the electrician is only human, and should have comfortable working conditions.

The switchboard itself should be of the "dead face type," so as to be as safe as possible. It should have a sufficient number of switches so that the control of the lighting throughout both the house and the stage may be divided into units as much as possible. Of course, there is such a thing as going too far in subdividing the units of a house, but with the stage there is hardly any question. A switch should be provided for each color in the footlight, for each color in each of the borders, for each color in each set of pockets, and for the various pockets throughout the stage. It does not pay to skimp on the stage switchboard.

The remarks relative to the switchboard apply to the dimmers. Particular care should be taken to design these of sufficient capacity for the load they are to take care of. Dimmers are rather sensitive, they can do just so much and no more. They cannot be safely overloaded, and if underloaded, will not properly dim. The dimming equipment should be placed above or below the board if not too large, and where there is plenty of ventilation, so that heat may be taken off as it develops.

No house is now complete, whether it be for legitimate or intimate drama, musical comedy, or any other purpose, without a picture booth. The utility of a room of this sort is fully recognized, and it is now used for spot and flood light purposes in houses that do not show moving pictures. Formerly the spot light operator occupied what was perhaps the most valuable seating room in the house, the front of the first balcony. Now, however, he is put in a booth, and does not disturb the patrons in any way by his presence.

The electrical equipment of the booth for legitimate houses should consist of a sufficient number of pockets of large capacity for spot and flood lights. In addition it should be

provided with capacity for one or two picture machines, even though they are not required when the theatre is opened. The value of making provision for these machines is apparent to any manager who is suddenly called upon for current in excess of that originally provided for.

Of course, in a moving picture house or in a house presenting vaudeville and moving pictures, the booth is the main part of the building, and it should have in its equipment adequate provision for two or three picture machines, spot lights, etc. The architect should also be sure to provide direct current for the picture booth apparatus, and if direct current is not available from the regular lighting company's service, it should be provided by means of a transforming device of some kind.—M. J. Levy, "Architecture and Building."

WIDE FIELD SEEN FOR TRAINED ENGINEERS.

The "Engineering News-Record" has consistently urged holding all the technical students who have not actually or nearly completed their courses in the technical schools of the country, instead of encouraging their early entrance into the armies that are being raised. That stand was not popular among the men, who felt deprived of an equal chance with their fellows in sharing the honors of battle. But in the last analysis it called on them for a higher type of patriotism. We hold, moreover, that it is best temporarily to exempt from the draft those men who are actually following engineering, chemical and medical courses in American colleges—on the score of their higher usefulness after their studies have been completed.

More than a mere holding of the technical students in college is what we would now urge. We earnestly advocate a heavy enrollment in the entering classes of this and subsequent years.

But in urging that every proper influence be brought to bear upon qualified candidates to take up technical courses, we cannot unreservedly subscribe to propaganda which has recently been started. The arguments used to float this propaganda are: That after the war the whole world will have to be reconstructed by American engineers; that there is an appalling dearth of engineers abroad, and soon will be here; that European technical schools are completely paralyzed, and American schools bid fair to be; that the general demand for engineering service is beyond the supply in America; that engineering is sure to be the most lucrative profession in a few years.

In regard to all such claims we feel, from our own multiplied observation and contact with workers and work, that a vast amount of engineering effort will be needed in rebuilding within the theater of war, but the devastated areas are not such an appreciable

percentage of the European built-up districts that all the engineers of the world will be engaged on rehabilitation for an indefinite time. War casualties among the engineers of other countries have been heavy, but the profession abroad is not reduced to uselessness through its reduction in numbers or in leaders. In America there are engineers for any class of work sufficient to meet all existing demands—except in certain industrial lines where the demand is apt to be more or less temporary. There is no conclusive evidence of such general improvement in the status and emoluments of engineers as warrants drawing men into this field.

Our conviction that entrance to the technical courses of our colleges should be stimulated to the maximum number that can be accommodated springs from our realization that the field for engineer efforts certainly will not be restricted and that a wide variety and great number of dire contingencies to our country can be provided against if the supply of technical graduates is normal or somewhat larger. Our conviction springs also from the feeling that the educational value of technical courses is as great as possibly can be secured from any higher education, and that they well train their graduates in mental processes and attitudes of great value in a business career.

In thus urging to greater efforts every one who has any contact with or influence upon possible students, we would have greater emphasis than ever put on proper qualifications—an innate bent for things scientific, a creative imagination and a peculiar sensibleness (so far as they can be recognized in a youth of eighteen), coupled with adequate preparation in general studies, mathematics and natural science.

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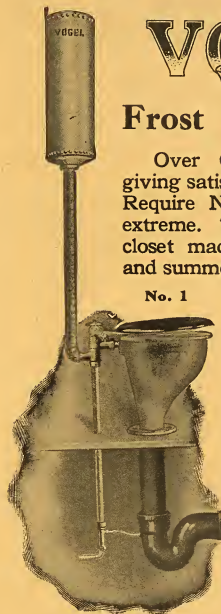
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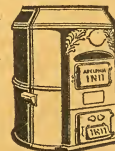
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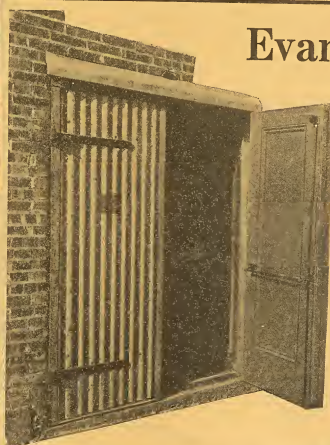
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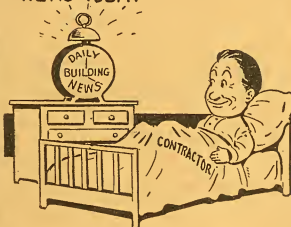


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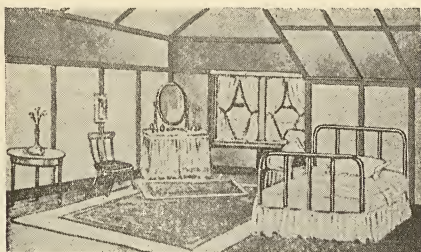
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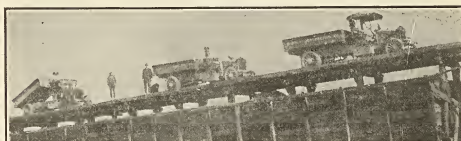


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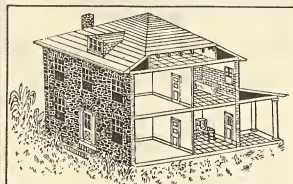


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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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March 20, 1918

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As The Editor Sees It



THE general business depression which has prevailed during the winter months is rapidly disappearing, and the trend of economic conditions is toward improvement.

February showed increase in the total value of business and from all sides come optimistic reports. The bank clearing for the first three weeks of February, compared with those of the same period last year are as follows:

Bank clearings for February (excluding New York City).

Week ending Feb. 2: 1918—\$2,392,010, 514; 1917—\$2,292,386,150; per cent. increase, 4.3.

Week ending Feb. 9: 1918—\$2,342,844, 435; 1917—\$2,253,575,785; per cent. increase, 4.0.

Week ending Feb. 16: 1918—\$2,453,002,921; 1917—\$2,143,395,183; per cent. increase, 14.4.

Weekly failures for February are consistently lower than in 1917 and industrial dividend payments for February are 4 per cent. greater than a year ago.

There is an increased demand for houses already built, which will, of course, necessitate building of new ones, sooner or later.

Reports on building material show that structural steel is in great demand for Government business. Prices quoted for beams and channels up to 15 inches are 3c at the mill, Pittsburgh and Chicago basis, this being the official price.

Domestic demand for wire nails is

fairly heavy and export demand is very great. Prices are: \$3.50 base, per keg, Pittsburgh; and out of store at New York, \$4 base, per keg.

Recent contracts were placed for 30,000 kegs of structural rivets, largely for use in Government navy yards.

Structural rivets are quoted \$4.65 and conehead boiler rivets \$4.75 per 100 pounds f. o. b. Pittsburgh.

Demand for lumber from the general consuming trade is increasing, and there are signs of improvement in the demand for brick.

This trend upward in the business outlook is due to several causes. In the first place the coal situation which was so acute during the cold weather has been greatly relieved, as has also the car shortage.

The Government expenditures, too, are influencing the situation greatly, the money for many big projects being in circulation.

Of greatest interest to the building trades is the need for homes all over the country, and of various other types of building. Not only is there a demand for workingmen's homes in all sections where big Government contracts are in progress, but there are other kinds of buildings, the erection of which should not be postponed. In an article on "The Building Question with Relation to Schools" in the *American School Board Journal*, Mr. J. C. Llewellyn, architect, Chicago, says:

"Patriotism calls for generous support of the government. It calls also for just as generous support of the many forms of activity which go to build up the manhood of the nation and to maintain our people as a people in condition to do their best in any line of endeavor.

"There never has been a time when the schools, especially our high schools, could be used to such good purpose and be made to render so large a service to the country as to-day. One of the great needs of the country is men and women equipped with a knowledge of chemistry, physics and of industrial vocations which will enable them to take a place and perform intelligent service in the laboratories and shops of our land. The part which the technically trained man is playing in our war activities is very great. Our colleges stand first in the production of this type of man; our high schools next; and the high school is absolutely a prerequisite to the college. Any other method of producing this type of man power is extremely slow. The factory trained boy or man knows the process he works with every day without necessarily knowing much beyond it. He becomes a routine man. The school trained man will have the broader and more fundamental principles on which to build, will have more or less initiative and be capable of working independently on a variety of subjects. He is far more than a routine man.

"A distinguished educator said, a few

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days ago, in my presence, that our schools did not go far enough in the sciences; that the lack of thoroughness in this department of our education constituted one of the reasons for the attitude of indifference on the part of the Central powers to our country and to what we could do if we entered the war.

"The Bureau of Education at Washington evidently realized this situation when it issued its circular last May outlining ways in which the schools could be made to render greater service to the country.

"The circular advises that 'costly building should not be undertaken' but when read in connection with the rest of the circular this becomes a plea rather for careful economy in building, providing what is necessary in an economical way, rather than more than is necessary in expensive or elaborate construction."

Building, as a base of the industrial structure, has been more affected by the prevailing war sentiments than some of the other industries. So strong have been the demands for economy and sacrifice on the part of the public, that its viewpoint became distorted, and a state of affairs existed which, had it lasted, might have brought ruin to the nation's industrial life.

As to the argument that high prices of materials and the scarcity of labor prohibit building at this time. Mr. Llewellyn continues:

"The history of building has been that the total cost of building does not advance in direct proportion with the increase in price of material or labor. The offset has been obtained by closer study of conditions, resulting in greater economy of construction and use of material, by better and more effective organization of the work, the adoption of labor-saving machinery, and similar methods. Present conditions call for increased efforts along these lines.

"An efficient means of reducing costs is intelligent planning.

"I am thoroughly convinced from what I can learn of the material market, the demand for labor and all things entering into building cost, that the wise man is the one who ceases to compare the present with the past, but seeks to learn of the future, for the old order of things has passed."

* * *

THAT this optimism is not unfounded, that building activity has already made some progress are facts borne out by the following statements in *The Ohio Architect, Engineer and Builder*:

"A company has been incorporated at Youngstown, known as the Hawk-Palmer company, with a capital of \$1,200,000

to build houses in that city and tributary territory to meet what is declared to be a shortage approaching the famine stage. It will be the aim of the company once in operation to erect dwellings at the annual rate of 75.

"The Hawk-Palmer company will aim to meet the general need of the community—to supply all classes of prospective home owners. The company has been launched as result of a survey, said by O. E. Hawk to indicate a house shortage

in this section of the valley of at least 5,000 structures.

"The development of the community and stability of its people largely depends on adequate and suitable housing facilities, says Mr. Hawk, and for that reason he expresses the opinion that it is a patriotic duty to supply this demand. He feels also that the community is able to handle this matter without government assistance and for that and other reasons the new company has been formed."

EDITORIAL NOTES

Conklin & Convery, architects, have moved their offices from 665 Broad street to 28 Central avenue, Newark, N. J.

* * *

Jensen & Brooks, architects, have recently moved their offices from 196 Smith street to 174 Smith street, Perth Amboy, N. J.

* * *

Hugo Taussig, architect, formerly at 1476 Broadway, is now located at 507 Fifth avenue, in the offices of James Riley Gordon.

* * *

W. P. Davenport, secretary of the William H. Page Boiler Company, 141 West Thirty-sixth street, is in the South for a winter vacation.

* * *

Samuel Katz, architect, 405 Lexington avenue, has discontinued the practice of his profession for the period of the war. He has entered the service of the Government.

* * *

M. G. Tuzik, architect, 175 Smith street, Perth Amboy, N. J., has discontinued his offices and the practice of his profession for the period of the war, and has enlisted for service in France.

* * *

Alsen's American Portland Cement Works announce that the general offices of the concern are now located in the Broadway Chambers Building, 275 Broadway, New York.

* * *

George W. Elkins has tendered his resignation as a member of the Committee on Comprehensive Plans, Philadelphia, with which body he had been connected for a number of years. The resignation was accepted and the vacancy filled by the appointment of John H. McClatchy, a well-known operative builder.

* * *

O. H. Bachtel, president of the Canton Builders' Exchange, predicts that the coming year will be a native one in the building industry of that city. "Contrary to several current humors, I see no reason to believe that this summer should not see the most extensive and continuous building business possible; certainly the biggest in the history of the

city." A movement in Canton in the direction of home building is well under way and is being fostered by the Builders' Exchange, the Chamber of Commerce and other civic bodies of that city. Homes especially for working men are to be built. Structures of a durable type are to be planned.

* * *

American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building, New York City.

* * *

New Jersey State Association of Master Plumbers will hold its annual convention in the East Orange Rink, 15 Halstead street, East Orange, N. J., May 14-16, 1918. State secretary, W. F. Beck, 36 North Center street, Orange, N. J. In connection with this convention there will be an exhibition of manufacturers' and jobbers' supplies. Both the convention and the exhibit will be under the direction of the local associations.

* * *

National Metal Trades' Association will hold its next convention at the Hotel Astor, April 22 to 25, inclusive. The convention proper is arranged for morning and afternoon sessions on April 24 and 25. As usual, there will be a banquet Wednesday evening, and the preceding days of the convention will be devoted to meetings of the Executive Committee and the Council.

* * *

American Society for Testing Materials will hold its twenty-first annual meeting at Atlantic City, N. J., June 25-28, with headquarters at the Hotel Traymore.

* * *

National Hardwood Lumber Association will hold its twenty-first annual convention in Chicago, Ill., June 20-21. The headquarters will be located at the Congress Hotel.

* * *

Chamber of Commerce of the United States of America will hold its sixth annual meeting April 10-12, in Chicago.

National Wholesale Lumber Dealers' Association will hold its twenty-sixth annual meeting at the Waldorf-Astoria, March 27-28.

National Pipe and Supplies Association will hold its annual convention at Cleveland, Ohio, May 13-14, 1918. Headquarters at the Hotel Hollenden.

National Association of Brass Manufacturers will hold its spring meeting at the French Lick Springs Hotel, French Lick Springs, Ind., March 27-28.

Imports of tin into the United States in 1917, not including Alaskan ores, were 68,996 tons, compared with 66,624 in 1916.

It is estimated that at least 5,000 tons of metallic tin are used yearly in this country to make tin tetrachloride, which is purchased by silk dyers for weighting and finishing silk. The "American Metal Market" says that by far the largest percentage of tin recovered from tin-plate scrap is now devoted to this purpose by the silk industry, and is lost. It

urges that such use be suspended during the war as a tin conservation measure.

The United States, according to geological experts, contains over half the entire coal resources of the world. The quantity in the United States, including Alaska, is estimated at 44,231 billion short tons and that of the whole world at 8,147 billion tons. Germany is fourth with 466 billion tons to its credit, or about one-ninth of the United States.

Comments are widespread upon the importance which the construction of garages is attaining. These car houses are springing up everywhere, even in the remotest hamlets, and are steadily increasing in size and attaining to better forms of construction.

Railroad men in the Northwest say that the construction of storage plants by manufacturers will probably be active this spring. For many years, they say, manufacturers have been using cars for storage, and now that there are no cars available for this purpose warehouses must be provided.

Government embark on the day labor plan, because it was convinced it would entail inefficiency and delay and because the board believes the existing forces and organizations of contractors should be maintained as a public policy. Furthermore, it was thought that a central organization was undesirable, because the work to be done was so widely scattered over the country.

A survey of the work to be done by the new construction division indicates the magnitude of the Government's preparations to push the war to a successful conclusion. There are already under way in the United States eighty-five big jobs aggregating \$205,000,000. There are in prospect now 120 more representing \$278,000,000. In addition, there are forty jobs for housing troops representing \$390,000,000, while hospital construction alone represents \$10,000,000.

Prospective Work Varied.

The work in prospect includes storage terminals at Boston, Philadelphia, Charleston, S. C., and twenty-eight other points; Signal Corps cantonments and aviation fields at forty different points; powder loading plants and ordnance depots on the Atlantic seaboard; housing facilities for ship workers at sixteen different points; tuberculosis hospitals at Denver, Col., and Azalea, N. C.; a remount station at Charleston, S. C.; mechanical repair shops in Texas; three great office buildings in Washington in addition to those under way; a hospital at Fort Riley, Kan.; an isolation hospital at Tenafly, N. J.; extensions of the Springfield, Mass., arsenal, gas-making plants and gas shell-filling plants at many points.

Contracts have not been let for the majority of the great projects and the definite locations of all of them have not been so fully determined as to warrant announcement at this time.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A carload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

U. S. BUILDING PLAN "PROFITEER PROOF"

War Department Construction Division Prevents Inflation of Profits—Program is Gigantic

With the creation of a construction division in the War Department to handle the largest single building program in history—aggregating \$1,084,000,000—a board of eminent experts appointed by Acting Secretary Crowell reported that the present form of contract is "profiteer proof."

The new construction division will replace the cantonment division, which did the preliminary work of building National Army camps, and will carry on an immense building program involving hundreds of thousands of workmen and extensive structures for the Army throughout the country. It will be under the immediate direction of the chief of staff.

Headed by Prof. A. N. Talbot, of the University of Illinois, president of the American Society of Civil Engineers, the board includes John Lawrence Mauran, of St. Louis, president of the American Institute of Architects; Charles L. Main, of Boston, president of the American Society of Mechanical Engineers; John R. Alpine, representing the American Federation of Labor; R. Goodwyn Rhett, of Charleston, S. C., president of the Chamber of Commerce of the United States; E. W. Rich, of Schenectady, N. Y., president of the American Institute of Electrical Engineers; Frederick L. Cranford, of Brooklyn, N. Y., president of the General Contractors' Association of New York, and Oscar A. Reum, of Chicago, representing the Building Construction Employers' Association.

Asked to Examine Contract.

Because of the hundreds of millions of dollars involved the board was asked to examine the present form of contract, and, if necessary, propose a new one. The board reported: "The form of contract permits starting actual work weeks and even months before the details are completely worked out and delineated, and permits the Government to push the job at any speed it may elect, changing at will its scope and plan, but paying only what the work actually costs, plus a fee which is so reasonable as to be above the reach of fair-minded criticism."

This form of contract, so thoroughly approved, is known as the "cost plus sliding scale of fixed fee," in which fixed fees to contractors range from 7 per cent. on contracts of \$100,000 or less down to as low as 1½ per cent. on the very largest sums.

Subject to Approval.

The fee, according to this form, is fixed when the contract is let, and if the cost exceeds the estimate because of higher labor and material prices the contractor receives no additional compensation whatever. Labor and material prices will be subject to approval by the Government.

Under other forms of the "cost plus" contract, so widely attacked in Congress, it was possible for a contractor by running up labor charges and paying extravagant prices for material to increase his fee accordingly.

The board rejected the suggestion that the

BRICK—THE BUILDING MATERIAL OF THE AGES

Paper read before the Southern California Chapter, A. I. A., by Alfred F. Rosenheim,
F. A. I. A.

Quoting from Sir Charles Lyell's "Antiquity of Man."—"Granite disintegrates and crumbles into particles of mica, quartz and feldspar; marble soon moulders into dust of carbonate of lime, but hard, well-burnt clay endures forever in the ancient landmarks of mankind."

The complete story of brick has never been told. Its history is the history of architecture. The purpose of this paper is to bring home briefly to you the fact that brick, the building material which has come down through the centuries, is still the leading building material in America. Other materials have, in various countries and at various periods, crept in for a time, but brick has always serenely gone on its way and after each digression has come back with more prestige than ever before.

It is a noteworthy fact that every nation that has not had stone easily available for its building construction has developed some kind of durable brick, specimens of which are extant to-day. It would be interesting to know whether or not the ancient nations, which so far as we are aware had no intercourse, each independently developed its building brick.

Brick was known in the very earliest Biblical times. It was by building the "Tower of Babel" of brick that the "Babylonians" hoped to span the space between earth and heaven. The Babylonians as early as 3000 B. C. built structures of brick—brick which is still sound. The modern town of "Hillar," with a population of 8,000, is to-day almost entirely built of brick taken from the buried palace of "Nebuchadnezzar." Every brick manufactured in the time of that bearded old tyrant, was stamped with his name. That, so far as we know, was the first use of a "trade mark." Many of the brick made in those days had enameled or glazed surfaces which have retained their color to the present time.

The children of "Israel" were required to make brick for "Pharaoh" during their bondage in Egypt; and it was the decree which required them to furnish their own straw in the making of these brick that was directly responsible for the "Exodus." But with the Egyptians, as later with the Greeks, brick was a supplementary material. Their proximity to stone and the cheapness of their "slave" labor naturally made stone the dominant building material in these countries, particularly since they were ignorant of the fact that brick was the more durable material.

It remained for the Romans, the greatest engineers and builders of ancient times, however, to realize fully the possibilities of brick and to extend its uses to every kind of structure. They were the first to us burnt

brick extensively. They were also the first to discover many principles of construction which are used even down to the present day. With the expansion of the "Roman Empire" brick penetrated every corner of the European continent and found its way across the channel to the British Isles.

Meantime, the Chinese developed brick to such perfection that it has stood in the "Great Wall" for centuries. This wall, which was ten years in building, was finished about 211 B. C., and such was the architect of its construction that it is still sound.

The Saracens also developed a brick of their own and gave Europe lasting examples of their art in the "Alhambra" and other buildings they left behind them following their meteoric sweep across southwestern Europe.

In the Middle Ages brick was the most popular building material in Holland, the Netherlands, Italy and parts of Spain. Each country developed its own practice, leading to a great diversity in brick architecture. In England during this period, brick was largely covered with "compos," a practice abandoned in the beginning of the fifteenth century, when England began to perfect its brick architecture and give to the world buildings which set the standard until the present generation of American architects began to realize the possibilities of brick.

At the present time brick is the predominant building material in every civilized country. And the United States, whose building policy has never been worthy of its advance in the industrial field, is finally taking its place at the head of brick development.

It is a strange fact that the United States, in which material progress has gone to lengths never before reached in the history of the world, should, until recently, have been the least progressive in the matter of building. In the early Colonial days economic conditions were such that it was only natural for the Pilgrims to construct practically all of their buildings of wood. But why we should persist in building of the most inflammable and least stable building material is one of the riddles of history.

The conditions which made wood the most economical building material have long since passed. When the forefathers landed there was a generous supply of timber on every hand. All that was necessary to make a house secure from the severe climate of New England was to cut down trees and build thick walls which could resist every kind of weather. There was an additional reason for this form of building, for there were no brick-makers among the earliest colonists. Not until 1634 was the first brick house built on the American continent. That was built in the town of Medford, Mass., by Governor Crad-

dock, of Massachusetts Bay Colony, of brick brought from Europe, and has stood as a monument to the durability of brick for almost three centuries.

So far as we know, the first brick in America was made in the New Haven Colony in 1650, but very little was manufactured until after the Revolution.

But while brick was not extensively used, the most sacred monuments which we have of those early historical days were built of brick—the "Old State House" and "Faneuil Hall" in Boston, "Independence Hall" in Philadelphia, the old home of William Penn and the "Betsy Ross House" in which the first American flag was made. It has been possible to hand these down as an inspiration from generation to generation simply because they were built of brick.

Until comparatively recent times, wood in the ordinary building was the only material which was given any consideration. Only the pretentious houses of the rich and important commercial buildings were built of any other material, and in this class of buildings brick has always been the predominant material. Wood is, however, no longer cheap. Practically all the sources of timber within reach of the great centers of population have been exhausted. Lumber must now be hauled hundreds and, in many cases, thousands of miles, to market. Both the scarcity of the material and the high cost of transportation have taken from frame construction the only virtue it ever possessed—cheapness.

Since this condition has come about, the inventive American mind has been working overtime trying to find some substitute for wood in economical building. In our own day builders have spent much time and money in trying to make "stucco and cement" construction a success, but so far they have not been rewarded with any achievement worthy of note. This form of construction was borrowed from European countries where the coat of stucco or cement has always been put on solid walls of brick or stone as a background, and where climatic conditions differ greatly from most parts of the United States. Some attention has also been given to concrete, and while this is adapted to some forms of building, it has not yet been applied successfully to small buildings. The best that can be said of all these makeshifts is that they are experiments, which have not yet proved themselves.

A very good illustration of this fact is a recent residence erected by a man whose energy is devoted to persuading people to build "stucco" houses. This man erected a fine house on one of the best known residence streets in a large Western city, and presumably it was in every way built in accordance with the most approved methods of this form of construction. Yet before he moved into the house, large rifts and cracks had marred its exterior. If one conversant with the best methods of building stucco houses meets with such failure, what hope is there for the owner who is inexperienced and who must depend entirely on others in the building of his house?

Through all these changes and fads in building construction the best houses have continued to be built of brick, for the simple and sufficient reason that for beauty and permanency no other material has ever approached it; and now, in our own time, in addition to these advantages, other materials have so nearly approached brick in cost that brick is also the most economical building material.

I have already suggested that no building material possesses the advantages of brick, and without going too deeply into the matter I wish to bring a few of the more important ones to your attention.

There are so many examples of the beauty of brick construction in almost every locality that merely to suggest this advantage, is sufficient. The best evidence that brick is the most durable of all building materials is the very history of brick itself. But there are other considerations as important as these.

After most exhaustive investigations, insurance experts, architects, chambers of commerce and the United States Geological Survey have come to the conclusion that no building material yet discovered even approaches brick in fire-resistive qualities. Nothing has more forcibly brought this fact to the attention of the American public than the San Francisco and Baltimore fires. The only walls that came through these disasters, that were fit to be used again, were built of brick. The reason for this is self-evident. This advantage in brick construction is further emphasized by the fact that the difference in the cost of fire insurance on brick and frame houses is from 25 to 50 per cent. in favor of brick.

Another important consideration in every building is the cost of maintenance after the building is completed. No house so nearly maintains itself as a brick house. Every other form of construction requires constant attention. The one item of painting soon makes up for the difference in first cost between frame and brick construction. The annual cost of upkeep and repairs on an ordinary frame house costing \$10,000 is \$250, or an annual tax of 2½ per cent. on the original cost of the building, according to statistics gathered by the Committee on Fire Prevention of the Boston Chamber of Commerce. The percentage practically holds, no matter what the size or the cost of the building.

Aside from this consideration of the increased cost of maintenance in other forms of construction, a brick house is the only house whose value does not depreciate from the very day it is built. There are many instances in every community where brick houses, after years of service, have been sold for more than their original cost. This fact alone makes a brick house a much more stable form of investment than a frame house, for the selling value of the house is the only tangible index of its value.

Another saving which comes with a brick house is in the matter of heating. A brick house not only requires a smaller heating plant than a frame house of the same size, but also saves from 20 to 25 per cent. of fuel. Further-

more, all the inconvenience and cost of frozen plumbing are eliminated in a brick house. Without entering into details, everyone knows that there is no cooler house in summer than a well-constructed brick house.

These advantages have long been conceded to brick, but through force of habit persons look upon brick as an expensive form of construction. People who must necessarily economize in building have come to regard brick as beyond their means. Yet it is a fact that the more one is forced to economize, the less one can afford not to build of brick.

I do not maintain that brick construction is cheaper in first cost than frame or stucco. What I do claim for it is (and I have ample ground upon which to base this claim), that brick is the most economical form of construction. The difference in first cost is so slight that it is only a matter of a few years before the saving in the expense of maintenance, in fuel, fire insurance, etc., more than makes up this difference.

This matter of the comparative cost between brick and frame has been given a great deal of consideration in the last few years by committees on fire prevention, which have been appointed by civic bodies in many cities. While the primary object of these investigations has been to find some remedy for the great annual loss by fire in American cities, almost all of these committees have taken up the "relative cost" and maintenance of various forms of construction to show that brick buildings, which are most fire-resistive, are also the most economical.

The relative cost of building materials vary naturally varies greatly in different localities, due to proximity to one or another form of construction material. It has been possible, however, from all these reports to arrive at an average cost, from which the cost in different section will not vary greatly.

The greatest difference is between all frame with clapboard exterior and a 13-inch solid brick wall with exterior facing of a high grade front brick. This difference, however, is only 10.7 per cent. The difference between a clapboard house and a brick veneer on frame standing is 3.3 per cent. It is also interesting to note the difference between brick and stucco. There the solid 13-inch brick wall is only 5.8 per cent. higher than "stucco on hollow tile."

It is always well to bear in mind, in considering the relative cost of brick and other forms of construction, that the difference in cost is entirely the difference in cost of the outer walls of the building. The interior construction of the building, which is after all the largest item in the cost, is practically the same in all kinds of buildings.

Fifty years ago the grocer set out a keg of mackerel and a box of kindling wood, and sat down to wait for customers. Today he carries street-car and newspaper advertising and dresses his windows as smartly as the department store. If it didn't pay he'd still be sitting behind the stove waiting for customers with a mackerel keg out front doing service for a sign.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR HOPEING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

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Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Dispensary and Administration Building, Seventh street between Lancelany and Cypress streets, Philadelphia. Architects, Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babies' Hospital of Philadelphia, care Mr. Davidson, 1713 Walnut street. Brick, stone and steel, 4 stories and 2 stories and basement. Architects taking approximate bids. R. C. Ballinger & Co., 218 North Thirteenth street, and F. L. Hoover & Son, 1023 Cherry street, F. B. Davis, 240 North Sixteenth street, are figuring.

Library (Kingsessing Branch), Fifty-first and Chester avenue, \$50,000. Architect, Philip H. Johnson, Land Title Building Philadelphia. Owner, City of Philadelphia, care of Librarian Joan Ashhurst, Thirteenth and Locust streets. Stone, brick and terra cotta, 1 story and basement, slag roof, cement floors, electric lighting, metal lath, ornamental iron work. Plans completed. Owners will advertise for bids in 10 days.

Moving and Erecting Old Paint Shop, Frankford Arsenal, No. 5,678. Architect, private plans. Owners, U. S. Government, care of Col. Geo. Montgomery, Frankford Arsenal. One story, 181 feet long, addition 72 feet, maple floors. Owners taking bids, due as soon as possible. Wm. R. Dougherty, 1610 Sansom street, and W. W. Anstine Co., 1218 Filbert street, are figuring.

Primer Packing House, No. 6,095, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Ed. J. Benter, Frankford Arsenal, Philadelphia. One story, 50x24 feet, asbestos shingle roof, composition floors, metal lath, kalamain doors, roof ventilators, waterproofing. Owners taking bids, due as soon as possible. Wm. R. Dougherty, 1610 Sansom street, and W. W. Anstine Co., 1218 Filbert street, are figuring.

Bungalows (4), N. V. Cor. Mt. Pleasant and Germantown avenues, \$16,000. Architect, Orris S. Miller, Mt. Airy avenue, Germantown. Owner, John S. Miller, 208 South Twelfth street, Philadelphia. Brick and stucco, 2 stories, 16x45 feet, slate and slag roof, hot water heating, electric lighting, tile and marble work, hardwood floors. Owner will sub-let.

Residences (5), Germantown, Philadelphia. \$45,000. Architect, Harry V. Nickels, 4400 Manayunk avenue, Philadelphia. Owner, Harry Shoemaker, Middle City Building, Philadelphia. Cut stone, 2½ stories, 46x46x28 feet, L-shaped, slate roofs, stone foundations, hot water heating, electric lighting, tile work, hardwood floors. Plans about completed. Owner will take general bids in one week.

Residence (int. and ext. alts.), 2231

North Thirty-third street, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Morris Polin, 1030 Arch street, Philadelphia. Consists of general interior alterations, mill work (heating, lighting and tile work, reserved). Architect has received bids.

Printing House (add.), 227 South Fifth street, Philadelphia. Architect not yet selected. Owners, John P. Murphy & Co., 227 South Fifth street, Philadelphia. Brick, concrete and steel, 2 story rear addition. Work contemplated.

Residence (alt. and add.), 1728 South Broad street, Philadelphia. Architects, Milligan & Pierson, 520 Walnut street, Philadelphia. Owners, August Social and Beneficial Society, care Lewis Pelstring, President, Eleventh and Fitzwater streets, Philadelphia. Brick, rear addition, 2 stories, 20x21 feet, slag roof, electric lighting, hardwood floors, slate work, dumbwaiters, bar fixtures, hollow metal skylights (plumbing and hot water heating, reserved). Owners have received bids.

Cow and Horse Stable, rear of Penn avenue and Rising Sun Lane. Architect, Leon W. Crawford, Odd Fellows' Building, Wilmington, Del. Owner, Wm. Winder Laird, Wilmington, Del. Brick and hollow tile, 2 stories, 52x28 feet, shingle roof, concrete floors, roof ventilators. Revised plans in progress.

Garage, 419-21 Carpenter street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owners, Landenson & Son, premises. Brick, 2 stories, 63x215 feet, slag roof, concrete floors, electric lighting. Plans completed. Architect ready for bids.

Elevated Stations. Conts. Nos. 537 and 538, Frankford Elevated. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, tile, marble and terrazzo work, rolled steel sash and skylights, hollow metal sash and doors, fire doors, iron stairs, cement floors, hollow tile, safety treads, roof ventilators, metal ceilings, wire work, ornamental iron work (electric work and plumbing, separate bids). Lowest bids submitted by Standard Const. Co., 1713 Sansom street, No. 537, \$67,000; No. 538, \$52,000. James Connor, 1317 Arch street, No. 537, no bid; No. 538, \$57,800. Pringle Borthwick, 8018 Germantown avenue, No. 537, \$74,525; No. 538, \$59,865.

Residence and Garage, Paoli avenue, Roxborough, Philadelphia. Architect, Her-

man Miller, Crozer Building, Philadelphia. Owner, William Aman, 342 North Forty-second street, Philadelphia. Brick, 2 stories, 32x44 feet. Architect taking bids, due March 25th. Stacy Reeves & Sons, 2011 Market street, are figuring.

Residence, West Philadelphia. Architects, Heacock & Hokanson, Bailey Building. Owner, name withheld. Stone, 2½ stories, 17x48 feet, slate roof, warm air heating, tile work, hardwood floors. Plans about completed. Architects will take bids in a few days.

Sub-Marine Base, Pier D., Spec. 2,549, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, Bureau of Yards & Docks, Navy Department, Washington, D. C. Plans in progress.

Water Supply, Fire Protection and Drainage, Tulip street Yard, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia. Clay and shale pipe, concrete work, lumber, iron and brick, iron stairs. Owners taking bids, due March 21st. A. L. Carhart, Hale Building, H. E. Baton, 1713 Sansom street, are figuring.

Artillery Firing Range, No. 330, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care Col. Geo. Montgomery, Frankford Arsenal. Reinforced concrete and brick, proof house 20x100 feet, 1 story; jolting house, 1 story, 8x8 feet; powder house, 1 story, 1x10 feet, range 338 feet, slag and ready roof, steam heat, electric light, concrete floors, kalamain doors, waterproofing, ornamental iron work. Lowest bids submitted by Wm. Linker Co., 831 Cherry street, \$76,600, 160 days. Mougan & Lasse, Inc., 3016 Chestnut street, \$77,239, 200 days.

Office (alts.), Ninth and Washington avenue, Philadelphia. Architects, Mortenson & Co., 405 Lexington avenue, New York City. Owner, American Ice Co., Sixth and Arch streets, Philadelphia. Hip skylights to roof, hollow metal skylights. Owners taking bids, due March 20th. P. Halbach Cont. Co., Twenty-sixth and Thompson streets, is figuring.

Babies' Hospital, Seventh and Delancey streets, Philadelphia. Architects, Duhring, Okie & Ziegler, Bailey Building, Philadelphia. Owners, Babies' Hospital of Philadelphia, care Mr. Davidson, 1713 Walnut street. Brick, 5 stories and basement and sub-basement, 81x40 feet. Architects taking approximate bids. F. B. Davis, 240 North Sixteenth street, additional bidder.

Elevated Stations (4), York and Dauphin streets and Girard avenue, Frankford

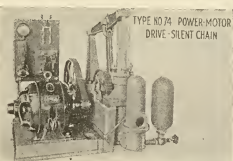
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Elevated, Philadelphia. Architect, Dept. of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, marble and terrazzo work, rolled steel sash and skylights, hollow metal sash and doors, fire doors, iron stairs, cement floors, hollow tile, safety treads, roof ventilators, metal ceilings, wire work, ornamental iron work (electric work and plumbing, separate bids). Plans in progress.

Store Building (alts.), S. E. Cor. Broad and Spruce streets, Philadelphia. Architect, Le Roy B. Rothschild, Bullett Building, Philadelphia. Owners, Kahn & Greenberg, Morris Building, Philadelphia. Consists of changing present store building to stores and offices. Work contemplated. Preliminary plans in progress. Too early for details.

Hotel, Philadelphia. Architect, Mahlon H. Dickinson, Bellevue Court Building, Owner, name withheld. Brick, stone, steel and concrete, 10 stories, 138x112 feet. Preliminary plans in progress. Too early for details.

Rooms (int. alts.) 781-83-85-87 City Hall, Philadelphia. Architect, Joseph A. Roletier, City Hall, Philadelphia. Owner,

City of Philadelphia, Room 113, City Hall, Philadelphia. New partitions, plastering, mill work, painting and glazing, metal lath. Owners taking bids, due March 26th. Albert Zellfelder, 151 South Broad street, and Geo. Dobbins, 414 South Forty-first street, are figuring.

Garage, Thirty-fourth and Market streets, Philadelphia. Architect, private plans. Owner, name withheld. Brick, 1 story, 12x29 feet, slag roof, steam heating, electric lighting, cement floors (gasoline storage system, reserved). Thos. C. Trafford, 1613 Sansom street, is taking sub-bids, due as soon as possible.

Undertaking Building and Offices (alt. and add.), 1927-29 North Broad street. Architects, Price & McLanahan, Bellevue Court Building, Philadelphia. Owner, Samuel S. Armstrong & Son, on premises. Brick, limestone and stucco, 3 stories, 40x80 feet, new front, general interior alterations. Plans about completed. Architects will take bids in about two weeks.

Residences (4), Sixty-first and Columbia avenue, Philadelphia. Architect, Mahlon H. Dickinson, Bellevue Court Building, Philadelphia. Owner, John H. McClatchey, Land Title Building, Philadelphia. Stone, 3 stories, 18x45 feet and 24x32 feet, slag and slate roofs, hot water heating, electric lighting, hardwood floors. Owner is taking sub-bids.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

School (Heston), Fifty-fourth and Lansdowne avenue, Philadelphia, \$155,255. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Brick, stone and reinforced concrete, 3 stories and basement, 95x36 feet, composition roof, cement floors, electric lighting, hollow metal sash, fire and hollow metal doors, ornamental iron work, metal lath, roof ventilators, wire work. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, Philadelphia.

Dwellings (2), Eighty-seventh and Gibson avenue, Island Road, \$3,600. Architect, private plans. Owner, M. Walters,

Eighty-seventh and Lyons avenue, Island Road, Philadelphia. Brick, 2 stories, 16x32 feet, slag roof, stone foundations, electric lighting, hot air heating. Contract awarded to John Madison, 216 Hox Road, Sharon Hill, Pa.

Garage and Wagon Shop, 3420-26 Filbert street, Philadelphia, \$5,000. Architect, private plans. Owners, Suppley-Willis-Jones Milk Co., Twenty-sixth and Jefferson streets. Brick, 1 story, 60x30 feet, and 2 stories 15x50 feet, slag roof, cement floors, electric lighting, fire doors. Contract awarded to Geo. A. Kessler Cont. Co., Drxel Building.

Machine Works (add.), 1217-22 Spring Garden street, Philadelphia. Architects,

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Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Hugo Bilgram Machine Works, on premises. Reinforced concrete and steel, brick veneer, 3 story addition, slag roof, hot water heating, rolled steel sash, hollow metal skylights, electrical work, (2) elevators. Contract awarded to Warren-Moore Co., Colonial Trust Building.

Store Building (alts. and add.), 244-46 South street, Philadelphia. Architect, J. Etnan Fieldstein, Penfield Building, Philadelphia. Owner, name withheld. Brick, 3 stories, 31x40 feet, maple floors, hot water heating, combination lighting, flush bulks, metal ceilings. Contract awarded to J. Gorchoy, 4116 Girard avenue, Philadelphia.

Factory (alts.), Front and Laurel streets, Philadelphia, \$25,000. Architect, private plans. Owners, Mary Disston Estate, on premises. Brick and steel, fire damage, 2 stories, 85x85 feet, slag roof, steam heating, electric lighting, pine floors, elevators. Contract awarded to F. W. Van Loon, Denckla Building, Philadelphia.

Boiler and Engine House, Office and Garage, Ontario and Brabant streets, \$19,000. Architect, private plans. Owners, The Fretz Co., on premises. Brick, 1 story and 2 stories, 42x63 feet, 64x37 feet, and 20x37 feet, slag roof, steam heat, electric light, cement floors. Contract awarded to H. E. Brocklehurst, 512 West Norris street.

Offices, Eighth and Chestnut streets, Philadelphia, \$4,000. Architect, private plans. Owner, Hermann Rumpff, Fifth and Cherry streets, Philadelphia. Consists of fire repairs to various offices. Contract awarded to A. R. Raff Cont. Co., 1635 Thompson street.

Office, Garage and Pump House (alts.), Thirtieth and Race streets, \$12,000. Architect, private plans. Owner, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Brick, 1 story, cement floors, steam heating, electric light, rolled steel sash, metal lath, roof ventilators, gasoline

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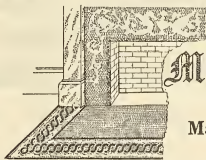
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Pennsylvania Building

(storage system, reserved). Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Residence (alt. and add.), Roxborough, Philadelphia. Architects, Heacock & Honkanson, Bailey Building, Philadelphia. Owner, name withheld. Stone, 2½ stories, 20x40 feet, shingle roof, hardwood floors, warm air heating, electric lighting, tile work. Contract awarded to Wm. H. Eddleman & Sons, 453 Green Lane, Roxborough.

Store Building, 1513 Filbert street, Philadelphia. \$2,000. Architect, H. B. Weldon, 1604 Cherry street, Philadelphia. Owner, M. O'Brien, 19 North Juniper street, Philadelphia. Consists of new front, galvanized iron and brick, 2 stories, metal bulks. Contract awarded to Smith-Hardican Co., 1606 Cherry street.

Factory Office (alts.), 144-46 East Allen street, Philadelphia. Architect, Mahlon H. Dickinson, Bellevue Court Building, Philadelphia. Owners, Gorgas-Pierie Mfg. Co., 126 East Allen street, Philadelphia. Consists of new partitions, mill and cabinet work, plumbing, new toilet rooms, etc. Turner Concrete Steel Co., 1713 Sansom street, are taking sub-bids in all lines.

Engine house (13 stalls), Tulip street, South of Somerset street. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia. Reinforced concrete and brick, 1 and 2 stories, 200 feet, J-M roof, concrete and asphalt and mastic floors, electric light, rolled steel sash, fire and hollow metal doors, hollow tile, waterproofing, or-

namental iron work, wire work. Contract awarded to Austin Co., Bulletin Building.

Sales and Service Station, Philadelphia. Architect, Mahlon H. Dick, Bellevue Court Building, Philadelphia. Owner, Stability Motor Co., care E. H. Bertolet, 807 Bellevue Court Building, Philadelphia. Stone and reinforced concrete, 2 stories, 70x120 feet, slag roof, steam heating, electric lighting, rolled steel sash, concrete floors, metal lath, elevators. Contract awarded to John H. Ott, Real Estate Trust Building, Philadelphia.

Garage, 5917 Drexel Road. \$2,500. Architect, private plans. Owner, P. A. Rakestraw, on premises. Stone, 1 story, 20x26 feet, slag roof, stone foundations, steam heating, electric lighting, metal lath. Contract awarded to M. W. Young, Overbrook, Philadelphia.

Armory (alt.), Broad and Diamond streets, Philadelphia. \$5,000. Architect, private plans. Owners, Armory Board, State of Pennsylvania, Harrisburg, Pa. Consists of general interior alterations, roof repairs. Contract awarded to J. P. Thompson, Real Estate Trust Building.

Residence (alt. and add.), 6330 City avenue, Overbrook. \$3,000. Architect, E. Purring, Narberth, Pa. Owner, W. T. Harris, Narberth, Pa. Stone, 3 stories, 22x24 feet, slate roof, hardwood floors. Owner will build.

Repair Shop, Fifty-eighth and Botanic avenue, Philadelphia. \$8,000. Architect, private plans. Owners, Gulf Refining Co., on premises. Reinforced concrete, 1 story, 40x65 feet, slag roof, cement floors, electric lighting. Owner will build.

Lancaster, Pa. Architect, C. Emlen Urban, Lancaster, Pa. Owner Julius Schafer, Lancaster, Pa. Brick, general interior alterations, 2 stories, electric lighting, marble work, metal bulks (heating, reserve). Architect taking bids, due as soon as possible. L. B. Wright, John Grube and Geo. Bachman, all of Lancaster, Pa., are figuring.

Apartment (alt.), Lancaster, a. Architect, C. Emlen Urban, Lancaster, Pa. Owner, A. B. Rote, Lancaster, Pa. Brick, general interior alterations, 3 stories, carpentry, electric lighting, pine floors. Architect taking bids, due as soon as possible.

Store (alts.), E. Market street, York, Pa. Architects, Gemill & Billmeyer, York, Pa. Owner, D. F. Hirsch, on premises. General interior alterations, 1 story, hardwood floors, electric lighting, tile and marble work, flush bulks, metal ceilings. Plans in progress. Architects will take bids in two weeks.

Residence, Parkesburg, Pa. Architect, Henry Y. Shaub, Lancaster, Pa. Owner, Chester Frankhauser, Parkesburg, Pa. Hollow tile and stucco, 2½ stories, 26x35 feet, slate or asbestos shingle roof, hot water heating, electric lighting, pine floors. Owner is taking bids.

Welfare Building, Ivy Rock, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Alan Wood Iron & Steel Co., Widener Building, Philadelphia. Brick, 1 story, 30x50 feet, slag roof, tile and marble work (plumbing, electric lighting and heating, reserved). Owners will build and will take sub-bids.

Apartment House (alt.), Marcus Hook, Pa. Architect, private plans. Owner, Harvey Booth, Marcus Hook, Pa. Brick, general interior alterations, 3 stories, 43x75 feet, electric lighting. Work completed.

Residence (alts.), Quakertown, Pa. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, name withheld. Stone, 2½ stories, 13x42 feet, interior alterations, hot air heating, electric lighting, tile work, new floors and electric water supply system. Architect has received bids.

Post Office, Sunbury, Pa. Architect, Jas.

PENNSYLVANIA Construction News

Auto Repair Shop, Franklin street, York, Pa. Architect, G. Frank Witman, City Branch Building, York, Pa. Owner, Harry Wiest, on premises. Brick, 1 story,

56x50 feet, composition roof, concrete floors, electric lighting. Architect is taking sub-bids.

Store (alts.), 12 West King street, Lau-

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Philadelphia, Pa.

A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick, 1 story, concrete foundations, 88x66 feet, composition roof, steam heating, electric lighting, tile, marble and terrazzo work, fire doors, metal lath, wood floors, roof ventilators, metal weatherstrips, dampproofing, ornamental iron work, wire work. Lowest bid submitted by West Chester Eng. Co., Whiteplains, N. Y. \$77,500.

Residence (alt. and add), Lancaster Road and Sycamore avenue. Architects, Seeburger & Rabenold, Pennsylvania Building, Philadelphia. Owner, Kiwa Schwartz, on premises. Brick and plaster. 2½ stories, new 2 stories, portico, brick and plaster, shingle roof. Architects taking bids, due March 20th. E. J. Hedden, Finance Building, A. L. Fretz & Son, Heed Building, F. A. Havens Co., 845 North Nineteenth street; J. Sims Wilson Co., 1125 Brown street, Philadelphia; Milton W. Young, Overbrook, Pa., and Alfred James. Bala, Pa., are figuring.

Residence, Wilkes-Barre, Pa. \$15,000. Architects, Sturdevant & Poggi, Coal Exchange Building, Wilkes-Barre, Pa. Owner, name withheld. Brick, 2½ stories, 22x46 feet, slate roof, steam heating, metal lath, plumbing, electric work, tile work, hardwood floors. Plans in progress.

Office Building, Ashley, Pa. \$6,000. (Coal Company Colliery). Architects, Sturdevant & Poggi, Wilkes-Barre, Pa. Owners, name withheld. Concrete foundation, brick, steel and limestone, asbestos shingle roof, metal lath, electric lighting, plumbing. Architects taking bids. (22x34 feet.)

Coal Company Colliery Office Building, Plymouth, Pa. \$6,000. Architects, Sturdevant & Poggi, Wilkes-Barre, Pa. Owners, name withheld. Concrete foundation, brick, steel, limestone, asbestos shingle roof, metal lath, electric work, plumbing. Architects taking bids. 22x34 feet.)

Coal Company Colliery Office Building, South Wilkes-Barre, Pa. \$6,000. Architects, Sturdevant & Poggi, Wilkes-Barre, Pa. Owners, name withheld. Concrete foundations, brick, steel, limestone, 22x34 feet, asbestos shingle roof, metal lath, electric work, plumbing. Architects taking bids.

Coal Company Colliery Office Building, Audenreid, Pa. \$18,000. Architects, Sturdevant & Poggi, Wilkes-Barre, Pa. Owners, name withheld. Brick, reinforced

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concrete and steel, limestone trim, 2 stories and basement, 30x62 feet, asbestos shingle roof, steam heating, metal stairs, slate work, plumbing, electric wiring, fixtures, carpenter work, linoleum floor coverings. Plans in progress.

Office Building (add and alts.), Wilkes-Barre, Pa. \$50,000. Architects, Sturdevant & Poggi, Wilkes-Barre, Pa. Owner, name withheld. New six-story addition, 50x100 feet, concrete, steel and brick veneer, hollow metal sash, slag and tile roof, marble and terrazzo work, ornamental iron, cabinet work, heating and ventilating, gypsum block partitions. Plans in progress.

Power Plant and Equipment, Clifton Heights, Pa. Architect, private plans. Consulting Engineer, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Kent Mfg. Co., Clifton Heights, Pa. Brick, 1 story, 47x60 feet, trussed slag roof, rolled steel sash, cement work. Architect taking bids, due March 25th. Coneen Const. Co., 1737 Filbert street; F. B. Davis, 240 North Sixteenth street; Standard Const. Co., 1713 Sansom street; Smith-Hardican Co., 1606 Cherry street; D. J. McNamee, 1621 North Fifteenth street, Philadelphia, and Lansdowne Const. Co., and J. Howard Roberts, both of Lans-

downe, Pa., are figuring.

Stores (3), Third and Edgemont avenue, Chester, Pa. \$5,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Penn Realty Co., Chester, Pa. Brick, 1 story, stone foundations, slag roof, electric lighting, hollow metal skylights, metal bulks. Plans in progress. Owner will take sub-bids in ten days.

Residence, Parkside District, Chester, Pa. \$7,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, name withheld. Brick and plaster, 3 stories, 20x36 feet, and 15x17 feet, slate roof, stone foundations, hot water heating, combination lighting, tile work, hardwood floors. Plans in progress. Architect will take bids in two weeks.

Residences (10) Sixty-ninth and West Chester Pike, Pa. Architect, Mahlon H. Dickinson, Bellevue Court Building, Philadelphia. Owner, John H. McClatchy, Land Title Building, Philadelphia. Stone, 2 stories, 24x32 feet, shingle roof, hot water heating, electric lighting, hardwood floors. Plans in progress.

Residence, Glenside, Pa. Architect, private plans. Owner, B. H. Davis, Glenside, Pa. Hollow tile (Dennis interlocking) and stucco, 2½ stories, 33x38 feet, shingle roof. Owner taking sub-bids.

PENNSYLVANIA

Contracts Awarded

Club House (alt.), York, Pa. Architect, Ed. Lober, York, Pa. Owner, Lafayette Club, York, Pa. Brick, general interior alterations to fourth floor, plastering, mill work, plumbing fixtures, tile and marble work. Contract awarded to Samuel Glatfelter, York, Pa.

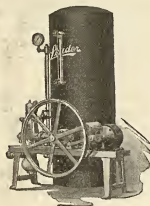
Store (alt. and add.), North George street, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owner, Walter Smutz, York, Pa. Brick, 2 stories, 22x11 feet, slag roof, steam heating, electric lighting, tile and marble work, pine floors, flush bulks. Contract awarded to Geo. W. Gilbert, York, Pa.

Service Station and Garage (alt. and

add.), Lancaster, Pa. Architect, Malvern Evans, Lancaster, Pa. Owners, Willard Storage Battery Co., Lancaster, Pa. Brick, 2 stories, 112x30 feet, slag roof, concrete floors (steam heating, reserved), electric light, metal lath. Contract awarded to Samuel H. Bally, Lancaster, Pa.

Foundry Building, Berwyn, Pa. Engineer, Robert F. Norwalk, Berwyn, Pa. Owners, American Bronze Corp., Berwyn, Pa. Brick, steel and concrete, 1 story and mezzanine floor, 82x100 feet, Barrett roof, cement and maple floors, hollow tile, metal lath, rolled steel sash, iron stairs, waterproofing (heating, lighting and plumbing, reserved). Contract awarded to Crowell-

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Lundoff-Little Co., Widener Building, Philadelphia.

Residence (interior finish), Villa Nova, Pa. Architect, Horace Trumbauer, Land Title Building, Philadelphia. Owner, Morris L. Clothier, Villa Nova, Pa. Consists of mill and cabinet work, grill work, hardwood floors, painting, etc. Contract awarded to A. Wilt & Son, 723 North Front street, Philadelphia.

Out Building, Marcus Hook, Pa. Architect, private plans. Owners, U. S. Government, care Lighthouse Inspector, P. O.

Building, Philadelphia. Brick, 1 story, 18x22 feet, concrete and slate roof, concrete floors. Contract awarded to the Rust Eng. Co., Pennsylvania Building. \$2,812.

House and Tower, Marcus Hook, Pa. \$26,215. Architect, private plans. Owners, U. S. Government, care Lighthouse Inspector, P. O. Building, Philadelphia. Brick, 2½ stories, 24x32 feet, limestone trim, tower reinforced concrete, 12x12 feet, slag roof, reinforced concrete and pine floors, iron stairs. Contract awarded to Rust Eng. Co., Pennsylvania Building.

NEW JERSEY Construction News

Bungalow, Ventnor, N. J. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, Harry Sachsenmaier, 141 North Third street, Philadelphia. Frame, 2½ stories, 35x75 feet, shingle roof, stone foundations, electric lighting, pine floors. Architect taking bids, due March 21st, at 9 A. M. Lam Building Co., 1001 Wood street; D. Henwood, 1509 Wood street; Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia; L. J. Brown and Joseph Mason, both of Atlantic City, N. J., are figuring.

Group of Buildings, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards & Docks, Washington, D. C. Frame and brick, 1 story, garage 26x23 feet, gate house 18x11 feet, pump house 12x9 feet, power house 55x36 feet, coal bin 60x36 feet, officers' building 90x27 feet, laundry building 96x31 feet, isolation group gallery 80x40 feet, brig and guard house 79x27 feet, dispensary 110x23 feet, receiving building 148x60 feet, barracks 95x27 feet, ready roofing, cement and pine floors, steam heat, electric light, fire doors, metal lath. Owners taking bids, due March 25th. Edw. Fay Son, 2 South Mole street, Philadelphia, Cramp & Co., Denckla Building, and Warren-Moore Co., Colonial Trust Building, are figuring.

Apartment (alts.), Riverton, N. J. Architect, Leonard H. Davis, Ambler, Pa. Owner, Dr. Alexander Marcey, Riverton, N. J. Frame, 2 stories, 36x60 feet, hot air heating, electric lighting, pine floors. Plans in progress. Architect will take bids in two weeks.

Residence (add.), (Fire Damages), Longport, N. J. Architect, H. A. Stout, Guarantee Trust Building, Atlantic City, N. J. Owner, Ralph Harcourt, Longport, N. J. Frame, 2½ stories, 32x24 feet, slate roof, hot water heating, electric lighting, pine floors. Architect taking bids, due March 21st. H. C. Scull, Wesley B. Porch, C. D. Thompson, P. G. Hannum, J. V. Mathis & Son, Wilbur Beaumont, and S. H. Headley, all of Atlantic City, N. J., are figuring.

Parish House, Trenton, N. J. \$7,500. Architects, Robert Schumann, 932 Lamberton street, Trenton, N. J. Owners, Rumanian R. C. Church, care Rev. E. Lucasi, 730 Cass street, Trenton, N. J. Brick, 2 stories, 40x28 feet (8 rooms), slate roof, hardwood floors, hot water heating, electric lighting, tile work. Plans in progress.

Garage and Cold Storage House, 51 Belview avenue, Trenton, N. J. \$8,000 Architect, Robt. Schumann, 932 Lamberton street, Trenton, N. J. Owner, I. Wagner, Trenton, N. J. Brick, 2 stories, 25x100 feet, slag roof, steam heating, electric lighting, hollow metal sash, fire doors, concrete floors, metal lath. Plans in progress.

Garage, South Broad street, Trenton, N. J. Architect, Wm. A. Klemann, Trenton, N. J. Owner, Samuel Horowitz, South Broad street, Trenton, N. J. Brick, 1 story, 24x26 feet, slag roof, concrete floors, steam or hot water heating, electric lighting. Owner is taking bids. Chas. Smith and Ernest Klemann, both of Trenton, N. J., are figuring.

New Jersey Contracts Awarded

Telephone Exchange, Gloucester, N. J. Architect, private plans. Owners, Bell Telephone Co., 1230 Arch street, Philadelphia. Consists of general interior and exterior alterations, plumbing, plastering and painting, brick, 2 stories, mill work, hot water heating, electric lighting. Contract awarded to Albert Zellfelder, 151 South Broad street.

Cottage (alt. and add.), Longport, N. J. \$2,500. Architect, H. A. Stout, Guarantee Trust Building, Atlantic City, N. J. Owner, P. E. Swope, 7915 Crested street, Chestnut Hill, Pa. Frame, 3 stories, 21x42 feet, shingle roof, pine floors (electric lighting, reserved). Contract awarded to Wesley B. Porch, Sheen Building, Atlantic City, N. J.

Stable, Northfield, N. J. \$3,145. Architect, J. Hudson Vaughn, Guarantee Trust Building, Atlantic City. Owners, Board of Chosen Freeholders, care Enoch Johnson, Clerk, Law Building, Atlantic City, N. J. Frame and concrete, 1 story and loft, 35x56 feet, felt or rubberoid roof, pine floors. Contract awarded to A. B. Bowen, 106 S. Cambridge street, Atlantic City, N. J.

Delaware Construction News

Garage, 1603 Broome street, Wilmington, Del. Architects, Brown & Whiteside, duPont Building, Wilmington, Del. Owner, Mrs. Geo. W. Chambers, Wilmington, Del. Stucco, 1½ stories, 20x28 feet, slate roof, wood floors, electric lighting. Architects taking bids. W. D. Haddock Co. is figuring.

Office Building (alt.), Wilmington, Del. Architect, R. C. Thndall, 914 Orange street, Wilmington, Del. Brick, 1 story, general interior alterations. Lowest bidder, Chas. J. Dougherty, Wilmington, Del.

Garage and Apartments, Wilmington, Del. Architect, E. C. May, duPont Building, Wilmington, Del. Owner, name withheld. Stucco, 2 or 3 stories, slate roof, electric lighting, hardwood floors, electric lighting. Plans in progress. Too early for details.

Armory (add.), Milford, Del. Architect, Leon W. Townsend, Wilmington, Del. Owner, General Wickersham, Wilmington, Del. Brick and stucco, 1 story, asbestos shingle roof, pine floors, electric lighting. Contract awarded to Joseph Rogers, Milford, Del.

Miscellaneous Construction News

Sub-Station "B" No. 2828, Frequency Changer House, Navy Department, Washington, D. C. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick and steel, 34 feet high, 58x142 feet, asbestos protected metal roof, concrete and pine floors, steam heating, electric

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lighting, iron stairs, ornamental iron work. Owners have received bids.

School Building, Keyser, W. Va. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owner, University of West Virginia (Keyser Branch), care State Board of Control, E. B. Stephenson, Charleston, W. Va. Brick, limestone and terra cotta trim, 2 stories and basement, 74x158 feet, slate and composition roof, plumbing, heating, electric wiring and fixtures. Owners will take bids, due April 10th. Plans and specifications may be obtained from office of the Board of Control, Charleston, W. Va., upon request, accompanied by check of \$10.00, same to be refunded when plans and specifications are returned with bids.

Hospital Corps Training School, Hampton Roads, Va., \$63,300. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick veneer, 156x88 feet, 2 stories, interior court, 70x27 feet, concrete foundations, slag, slate and composition roof, cement, composition, tile and wood floors, steam heating, electric lighting, fire doors, ornamental iron work. Contract awarded to King Lumber Co., Charlottesville, Va.

Shops (add.), Edge Moor, Del. \$75,000. Architect, private plans. Owners, Edge Moor Iron Works, Edge Moor, Del. Steel and concrete, 1 story, 80x275 feet, Bonanza tile roof, cement floors (heating and lighting, reserved), rolled steel sash. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street.

Maryland Construction News

Residence and Water Supply and Sewage Disposal System, Hurlock, Md. Architect, E. C. May, duPont Building, Wilmington, Del. Owner, name withheld. Hollow tile and stucco, 2½ stories, 35x38 feet, tile roof, vapor heating, electric lighting, hardwood floors. Plans in progress.

Packing Plant, Aliceanna street, near Central avenue, Baltimore, Md. Architect, private plans. Owner, W. H. Killian, Millers Wharf, Baltimore, Md. Frame, brick and corrugated iron, 1 story, electric lighting. Owner will take bids.

Residences (7), 2134-40 North Guilford avenue, Baltimore, Md. Architect, Jacob F. Gerwig, Equitable Building, Philadelphia. Owner, Edw. J. Storck, Munsey Building, Baltimore, Md. Brick, 2 stories, 25x35 feet, tin or slag roof, hot water heating, combination lighting, skylights, painting, tile work, plumbing, painting. Plans in progress. Owner will take sub-bids.

Maryland Contracts Awarded

Garage (add.), York Road and Arlington avenue, Baltimore, Md. Owners, Guilford Motor Co., on premises. Architect, private plans. Brick, 1 story, 100x200 feet, slag roof, hollow metal skylights, plumbing. Contract awarded to McLean Cont. Co., 1412 Fidelity Building, Baltimore.

Building, Bear Creek, Md. Architect, Chas. M. Anderson, 325 North Charles street, Baltimore, Md. Owner, Hiram W. Friedenwald, on premises. Concrete and brick foundation, frame, 2 stories, tin and composition roof, electric lighting, hollow metal skylights, plumbing. Contract awarded to George P. Mueller, 820 South Third street, Baltimore, Md.

Sub-Station, Linthicum Heights, Md. Architect, private plans. Owners, Maryland Electric Railway Co., on premises. Brick and stucco, 2 stories, slag roof, steam heat, electric light, hollow metal skylights, ventilators, plastering, painting, plumbing, tile work. Contract awarded to Cogswell-Koether Co., 406 Park avenue, Baltimore.

Warehouse, 415-19 Dover street, Baltimore, Md., \$3,000. Architect, private plans. Owners, Eagle Manufacturing Co., 410 West Camden street, Baltimore, Md. Brick and concrete, 1 story, slag roof, galvanized iron work. Contract awarded to Julius E. Pyles, 410 Dover street, Baltimore.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage Wagon Shed, 3420-26 Filbert street, \$5,000. Supplee-Wills-Jones Co. (O), 1515 N. Twenty-sixth street. George Kessler Cont. Co. (C), 931 Drexel Building. Brick, 1 story, 60x50 feet, and 2 stories, 15x50 feet, slag roof cement floor, fire doors.

Dwellings (4), Mt. Pleasant and Germantown avenue, \$16,000. John S. Miller (O and C), 125 Harrison avenue, Glenside. Brick, 2 stories, 15x43 feet, slate and slag roof, hot air heating.

Scale and Metal House, Tenth and Hamilton streets, \$1,500. Sterling Iron and Steel Co. (O), on premises. John J. Harding (C), 723 North Twenty-sixth street. Brick, 2 stories, 15x37 feet, slag roof.

Dwellings (18), Lambert and Spencer sts., \$41,400. Ira K. Davis (O and C), 2400 West Oakdale street. Brick, 2 stories, 15x29 feet, slag roof, steam heating.

Garage, 1225-27 Catharine street, \$1,500. Wm. Reed (O), on premises. Brick, 1 story, 30x45 feet, slag roof.

Dwellings (2), Eighty-seventh and Gibson streets, \$3,000. M. Walters (O), Eighty-seventh and Lyons avenue. John Madison (C), 216 Hox Road, Sharon Hill. Brick, 2 stories, 16x32 feet, slag roof.

Garage, 5408 Baltimore avenue, \$500. Robert McAlleste (O and C), on premises. Brick, 1 story, 15x32 feet, slag roof.

Garage, Brooklyn and Aspen streets, \$2,500. E. S. Kramer (O), 866 Pallace street. Warren E. Biscoe (C), 3954 Ludlow street. Brick, 1 story, 79x16 feet, slag roof, stone foundation, cement floor.

Garage (5), 1501-03-05-11-13 Widener Place, \$1,500. J. Cofman (O), 417 Lafayette Building. Philip Kolin (C), 2322 East Cambridge street. Brick, 1 story, 12x20 feet, slag roof, stone foundation.

Shelter Shed, Government avenue and South Broad street, \$12,000. Philadelphia Rapid Transit Co. (O and C), 810 Dauphin street. Shed, 15 feet high and 30x140 feet.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Office and Garage, Ontario and Brabant streets, \$5,000. The Fritz Co. (O), on premises. Drehmann Paving Co. (C), 2632 Parrish street. Concrete piles and girders. Alteration to office.

Repair Shop, Fifty-eighth and Botanic sts., \$8,000. Gulf Refining Co. (O and C), on premises. Reinforced concrete, 1 story, 40x68 feet, slag roof.

Armory, Broad and Diamond streets, \$5,000. Armory Board of State of Pennsylvania (O), Harrisburg, Pa. J. P. Thompson (O), Real Estate Trust Building. General repairs to building.

Store and Dwelling, 1827 South Twenty-first street, \$520. C. Storel (O), on premises. H. Blumenthal (C), 313 Spruce street. Brick, 1 story, 12x9 feet.

Garage, 5917 Drexel Road, \$2,500. F. A. Rakestraw (O), on premises. M. W. Young (C), Overbrook, Pa. Stone, 1 story, 23x26 feet, slag roof, metal lath.

Dwelling, 6330 City avenue, Overbrook,

\$3,000. W. T. Harris (O and C), Narbeth, Pa. Stone, 3 stories, 22x24 feet, slate roof and alterations.

Garage, Erie avenue and Trenton avenue, \$1,100. Reid Metal Refining Co. (O), Tulip and Tioga streets. Barnes Bros (C), 2080 E. Willard street. Fire repairs.

Club, 207 South Twenty-second street, \$460. United Service Club (O), on premises. Chas. E. Monday & Co. (C), 1318 Olive street. Brick and steel support for 3,000 gallons.

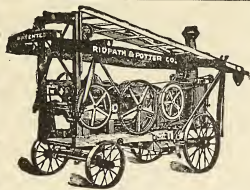
Factory, 450-52 North Twelfth street, \$2,000. W. P. Owen (O), Eleventh and Hamilton streets. John Duncan (C), 920 Walnut street. Repair fire damage.

Factory, 133 Broad street, \$2,000. J. E. Seibert (O), 622 Chestnut street. Wm. Meyer Co. (C), 216 Quarry street. Fire repairs.

Garage Hall, Seventh and Kater streets, \$5,000. N. Sternberg (O), 1644 South street. B. Bornstein (C), 1510 North Franklin street. Brick alterations to wall and fire escape.

Dwelling, 4213 Otter street, \$350. J. E.

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Lonergan (O), 215 Race street. Wm. Meyer Co. (C), 216 Quarry street. Fire repairs.

Dwelling, 4839 North Eleventh street, \$1,000. J. L. Kaigan (O), on premises. H. P. Schneider (C), 3713 York Road. Repair fire damage.

Garage, 8123-25 Germantown avenue, \$750. Paulo D. Puglia (O), on premises. Sam Paul (C), 8123-25 Germantown avenue. Stone, 1 story, 24x30 feet, peak roof.

Hospital, 1823 Naudain street, \$500. Poly-clinic Hospital (O), 1828 Lombard street. D. Kolodner (C), 416 Federal street. Alterations.

Garage, 1307-09 Rising Sun avenue, \$2,500. Chas. T. LaRue (O), 3239 North Fifteenth street. Frank K. Stahl (C), 2713 North Park avenue. Brick, 1 story, 18x60 feet, stone foundation, slag roof.

Shon, 1323 North Mascher street, \$700. Geo. P. Brannum (O), 3103 North Seventeenth street. Frank Keniff, Jr. (C), 1336 North Howard street. Alterations.

Dwelling, 3356 North Park avenue, \$500. C. Coons (O), Broad and Arch streets. W. G. Isles & Son (C), 806 Levick street. New partitions and 2 new bath rooms.

Store, Broad and Walnut streets, northeast corner, \$500. Fidelity Trust Co. (O), Philadelphia. Blot & Baust (C), 421 East Fifty-ninth street, New York. Alterations, new doorway.

Apartments, 1221 Walnut street, \$500. Robt. M. Bryson (O), Twelfth and Market streets. Thos. J. Carberry (C), 1215 Filbert street. Interior alterations, new partitions.

Garage, Potter and Clearfield streets, \$500. Norris Brody (O), 3120 Kensington avenue. Wm. Marriott (C), 233 Somerset street. Brick, 2 stories, 15x30 feet, stone foundation, cement floor and slag roof.

Garage, 1020 Buttonwood street, \$3,000. H. B. Underwood & Co. (O and C), 1025 Hamilton street. Erect runways for 2 5-ton cranes.

Store and Dwelling, 242-44 South street, \$700. M. Warager (O), on premises. J. Gorchov (C), 4116 Girard avenue. Alterations, interior plastering.

Factory, 336 North Third street, \$560. S. Rosenthal (O), 614 South Tenth street. Jacob Bender (C), 1517 South Fourth street. Alterations.

Dwelling, 729 South Colorado street, \$600. Mrs. K. Rushton (O), Wynwood, Pa. Valentine Meek (C), 518 South Twenty-second street. Fire repairs.

Dwelling, 733 South Thirteenth street, \$300. Posquale Giornobile (O), 1228 Fitzwater street. P. Nardy & Co. (C), 1228 Fitzwater street. Repair front wall.

Storage, 4450 Belgrade street, \$400. Belgrade Leather Co. (O), on premises. R. W. Barton (C), 4450 Belgrade street. Frame, 1 story, 18x54 feet, slag roof.

Dye House, Fourth and Somerset streets, \$1,000. J. J. Campbell (O), on premises. William E. Stone (C), 2069 East Dauphin street.

Brick, 1 story, 18x40 feet, slag roof, stone foundation, cement floors.

Dwelling, 152 Green street, \$1,100. Joe Cotler (O), on premises. Max Cotler (C), 1220 North Forty-second street. Brick, 2 stories, 12x12 feet, slag roof, interior alterations.

Factory, Ontario and Brabran streets, \$600. The Fritz Co. (O), on premises. H. Brocklehurst (C), 512 West Norris street. Fire repairs.

Bakery, Twenty-third and Master streets, \$8,500. Freihofer Baking Co. (O), Twentieth and Indiana avenue. Philip Haiback Cont. Co. (C), 1261 North Twenty-sixth street. Fire repairs, 3 stories, 99x87 feet, new floors and roof.

Dwelling, 5019 Grison street, \$320. George Royle (O), on premises. George R. Osborne (C), 5017 Duffield street. Frame, 1 story, 12x4 feet, stone foundation.

Factory, Melon and Seventeenth street, \$4,800. Bornot & Bro. (O), Seventeenth and Fairmount avenue. Philip Haiback Cont. Co. (C), 1261 North Twenty-sixth street. Brick, 1 story, 39x78 feet, slag roof, steel sash.

Banking, 1107 Market street, \$1,000. Market Street National Bank (O), on premises. F. W. Van Loon (C), Denckla Building. Alterations and 2 new skylights.

Dwelling, 748 South Ninth street, \$900. Frank De Luca (O), on premises. G. Console (C), 1517 South Sixteenth street. Alterations.

Dwelling, 2011 Chestnut street, \$1,480. Estate of Julian Shoemaker (O), 15 South Sixth street. Wm. R. Dougherty (C), 1610 Sansom street. Partitions and plastering, interior alterations.

Store and Dwelling, Lehigh and Germantown avenues, \$625. Patrick Hogan (C), Eighteenth and South streets. Dr. Leblang (O), 2842 Germantown avenue. Replace old bulk window.

Dwelling, 938 Jackson street, \$400. A. Lepper (O and C), on premises. Brick, 2 story rear addition, 12x12 feet.

Club, 118 North Eighteenth street, \$500. Musicians' Club of Philadelphia (O), 259 N. Sixth street. Raith Const. Co., Inc. (C), 302 North Master street. Interior alterations.

Dwelling, 1733 North Fourth street, \$850. John B. Stetson Co. (O and C), Fifth and Montgomery avenue. Alterations consisting of passage 5x30 feet, connecting 1733 to 1739.

Bank, 103 Levering street, \$2,000. Manayunk National Bank (O), Main and Levering streets. Elmer L. Cuthbertson (C), 334 Roxborough avenue. Brick, 1 story, 16x30 feet, slag roof, stone foundation.

Storage, Thirty-first, south of Master street, \$300. B. & E. Brewing Co. (O), Thirty-second and Master streets. E. E. Hollenback, Inc. (C), 1804 Brandywine street. Remove dangerous conditions.

Storage, 260 South Fifth street, \$1,000. L. E. Wiser (O), on premises. Harry Feldman (C), 5016 Parkside avenue. Brick, 1 story, 40x32 feet, slag roof.

Dwelling, 755 North Fortieth street, \$350. Mary A. Stackhouse (O), on premises. Warren Biscoe (C), 3954 Ludlow street. Front porch, 20x11 feet, tin roof.

Store, Twenty-second and Somerset streets, \$700. Leebberman Bros (O and C), on premises. New flush bulk and alterations.

Statement of the Ownership, Management, Circulation, etc.

Statement of the ownership, management, circulation, etc., of *The Builders' Guide*, published weekly at Philadelphia, Pa., required by the Act of August 24, 1912, for March 20, 1918.

Editor, H. L. Sharpe.

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Building News Publishing Co.,
Louis S. DeLone, President.

Sworn and subscribed before me this 14th day of March, 1918.

Edward J. Toole, Notary Public.

(My commission expires Jan. 21, 1921.)

THE VITAL MESSAGE OF ARCHITECTURE.

To consciously appreciate the influence exerted by architecture, it is necessary first to distinguish it, instinctively, from building. Every piece of architecture is a building, but every building (unfortunately) is not a piece of architecture. To appreciate architecture in terms of everyday enjoyment, or even inspiration, implies no technical knowledge and should need but little guidance, says the "Christian Science Monitor."

To be very unarchitectural, let us turn back to Plato for a moment, to let of his lucid statements which may make a good starting point. Said he: "Things fall into two classes. Some things have sensible likenesses easy to apprehend. These you can point out, and so teach them readily without trouble and the use of language. But the greatest and most precious things have no outward image of themselves visible to man, to which the teacher can lightly point and so satisfy the soul of the inquirer. Therefore, we must train and discipline our minds to render and receive an account of them in words. For it can be done in no other way."

The first of the two classes into which Plato believed all things fall—the class of things which possess a "sensible likeness" in architecture, are the forms which successive ages and different nation have evolved.

The proportions of a classic column, the detail of a bracket, or the divisions of a cornice—these are the technicalities, the mere material media of architectural expression, which

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are so often mistaken for "architecture." But "literature" is not to be found by conning the words in a dictionary, simply because a literary work is composed of words, any more than "art" is to be found in the pigments which are spread out on the painter's palette.

The forms, to be sure, are used by the architect to create a master-building, exactly as words are used by a writer and pigments by a painter, and the merit of the achievement of any one of these is measured by his technical mastery of the media in which he is working. But the achievement cannot but lack its fullest meaning, the meaning which every work of art must have, if the architect, the writer, or the painter, be not endowed with fine vision, with some sense of the element of nobility which he must infuse in his work.

Naturally, man was first a builder, then an architect. Shelter from the elements and from beasts of prey engaged his first thought. Soon, however, he came to worship something—to rise out of his strange human consciousness, to look to something higher and greater than himself or his material needs, and to this "something" he erected temples where he strove to express, in human terms, something of the sublime. This building, then, became more than building, it became a tangible expression of aspiration—in other words, it became architecture.

Such were the monuments of the ancient Aztecs in South America; in Egypt such wonderful efforts were achieved as the great temple of Karnak, architecturally majestic and fine after all the centuries which its colossal columns have seen. Religious beliefs changed in form and name, but the idea of architectural aspiration remained the same, and, in Greece, left to posterity the immortal dignity and nobility of the Parthenon. Then Rome, more worldly, more secular in its interests than Greece, expressed its majesty and self-importance in architectural terms—left the Colosseum, great viaducts, triumphal arches and the Forum as memorials of its greatness.

Out of the Dark Ages, architecture rose once more, at the beginning of the Thirteenth Century, in a guise which would have been unrecognizable by the Greek temple builders. Divergent in form, entirely different, architecture still played its great role as a medium for man's expression of spiritual aspiration. This was the period of the great Gothic cathedrals, where every line, every mass and every detail mounted ever upward in one great expression of altitude. It is because of this unity of intention that the Parthenon, for example, and the Cathedral of Rheims, are both master-works of architecture, though utterly different one from the other in their outward appearance.

Again, a great change, and the pendulum of architectural taste swung back once more to the classic idea. The builders of the Renaissance found further splendid possibilities for

expressing their most exalted ideals in the remains of Greek and Roman architecture. And so works of such architectural majesty as the great colonnade of the Vatican were designed, the dome of St. Peter's, and so, in England the vast fabric of St. Paul's Cathedral rose to heaven.

In those early times man was discovering the expressive possibilities of architecture, in several of its superficial forms, as a means of expressing great abstract ideals. In subsequent years, and in our own time, the course of architecture has followed in the same channels, for the simple reason that the possibilities of the great discoveries of the Greeks, the Romans, the builders of the Middle Ages, and of Renaissance Italy, have by no means been exhausted.

If we look about us we will discover the imprint of one of the fine old precedents upon every building of to-day that attains any conspicuous degree of impressiveness. Every great colonnade echoes the architectural nobility of Greece or the majesty of Rome. The Woolworth building and certain other great towers in Gothic vein point out to us the permanency of the underlying meaning in the works of those aspiring builders of the Middle Ages. Such a facade as that splendid colonnade of the Pennsylvania Railroad station in New York must be convincing proof that the

builders of Renaissance Italy built in terms which have outlived the intervening centuries.

But this may seem but a historic retrospect. What, for the receptive mentality to-day, is the message of architecture? Its meaning? The influence which it must exert upon us?

The message—its meaning, its influence—these are potent and full of deep-lying significance. Architecture, as read in the greatest buildings of the past, tells us of the history of man's aspiration; it is a human document; it is a record of fine achievement, of constant and sincere striving, through the exercise of head and hand, toward a great ideal; it is proof tangible of the continuity of human effort, rising, as it did, from the oblivion of the Dark Ages, surviving whatever personal vanity or vain-gloriousness of such individuals as sought to intrude egotistical personality. Through the medium of architecture, the thought of man and the hand of man conceived and fashioned a thing greater than himself, and a thing which long outlived the span of his own lifetime, because he sought ever to express, by column, or arch, or pinnacle, an ideal of sublimity, of majesty, of nobility.

To see these things in building is to see architecture; to see what it has meant to those who created it; to realize what it can mean to those of us whose priceless heritage it is.

FIRE PROTECTION IN MANUFACTURING PREMISES

By W. T. Coyer, of the National Fire Protection Association.

Business men are usually fairly consistent in their care or carelessness with respect to fire hazards. Thus, the man whose premises are most liable to burn as a result of poor construction and the absence of protection against exposure hazards is by no means the most careful to equip his premises with appliances which will give warning or aid in extinguishing fire, should it break out. On the other hand, the proprietor who has devoted time and thought to the construction and protection of his property is generally keenly alive to the fact that even under the best of conditions the more quickly a fire is discovered and extinguished, the better for all concerned. He knows that the best of fire-resistive buildings is not improved by being called upon to give a demonstration of its resistive capacity, and he realizes the importance of the finishing touch. He is not prepared, in English parlance, "to spoil his ship for a hap'orth of tar."

At this time of day it is unnecessary to stress the value of a properly installed and well-spaced sprinkler system as a property-saving agent. This value of course needs no argument so far as fire damage to stock is concerned, but, in view of the tenacity with

which some people cling to the idea that fire-resistive buildings will take no more harm from a fire within them than would a gigantic stove, it is necessary to point out that experience has shown that buildings properly described as fire-resistive may suffer serious structural damage from fire. There is always the possibility of abnormal conditions which could not have been foreseen by the designer; nor can such hazards as arise, say, from inadequate protection of metal members or reinforcing material in concrete, reasonably be disregarded. Faulty workmanship on the part of a contractor, careless planning by an architect with a soul above such details as the space required by service pipes that will have to be crowded into his columns, and a hundred and one other accidental circumstances may assume terrible importance in the event of a big fire. The prudent proprietor accordingly equips his premises with sprinklers—the mechanical watchmen which neither sleep nor scatter cigarette butts while on duty—which discharge water upon the fire almost as soon as it starts, which work on unperturbed by the thickest smoke, and which proportion their initial discharge of water to the extent of the fire.

The foregoing reference to the "initial" discharge of water has probably raised in some minds the question of water damage due to failure to shut off the flow as soon as the fire had been extinguished. Unquestionably there have been cases of heavy loss from this cause, but when compared with the values saved by the sprinkler the amount is negligible. Moreover, a great part of the avoidable water loss has been directly traceable to the neglect of proprietors to have their employees or watchmen properly instructed concerning the location of valves, etc. It is, however, clear that unless the automatic sprinkler be supplemented by some form of automatic alarm, there will always be the hazard of a water loss. There is a variety of alarms now in use, some connected simply to a rotary gong on the premises, others to local fire stations or to the central station of a supervisory system, by means of which notification is conveyed to competent persons who know both when and how to shut off the water. In some cases thermostats are used instead of, or as well as, sprinkler alarms. It need hardly be said that, it is of the utmost importance, when having a sprinkler system installed, to see that the appliances provided are of an approved type. On all individual problems such as these arising in connection with the choice of sources of water supply, of wet or dry pipe systems, etc., it is wise to consult the inspection department having jurisdiction.

Readers wishing further information in a small compass upon the subject of sprinkler installations cannot do better than consult a little pamphlet, "The Automatic Control of Fire," written by Professor Fitzhugh Taylor and published by the National Fire Protection Association. Mr. Gorham Dana's book on "Automatic Sprinkler Protection" may be commended to any who desire to pursue a more exhaustive inquiry.

The provision of an inside standpipe system may reduce both the hazard and the insurance rate to such an extent as to make it clearly a profitable investment; and a sufficiency of fire buckets and approved chemical extinguishers should be regarded as an integral part of the equipment of every building of any size. At this point we may conclude on a note of warning: Establishments furnished with the apparatus mentioned should be, and ordinarily will be, less liable than those of inferior equipment to serious damage by fire; but if it is imprudent to leave fire-resistant buildings unprotected with fire protective appliances, it is still more unwise to suppose that the staff of the firm occupying such a building can dispense with the services of the fire department in the event of a fire. Instances from time to time come before the notice of the National Fire Protection Association of ill-judged confidence in good construction and appliances resulting in failure to summon the trained fire-fighters until the fire has gained serious headway. Firemen rarely grumble at finding a fire to

which they have received a bona fide call extinguished before their arrival, but they have just cause for complaint if they find their work made more difficult and dangerous by the misplaced self-confidence of amateurs.

There is no more fatal attitude than that of the man who thinks that his premises "can't burn." Under the most favorable conditions he would have a fair chance of being undeceived, but the chance is largely increased by his nonchalant self-confidence. Fires arise from all sorts of causes in all sorts of ways, and are always most dangerous when they catch men unawares. It is well to pay special attention to specific hazards, but the best of all safeguards against fire is the safety habit.—"National Industries."

Changes in Industrial Effort After the War.

Knowing the strategic advantage of the workman's position to-day throughout the world, can any thinking man read the British Labor Party's tentative program for reconstruction after the war and escape the conviction that there are going to be fundamental wide-flung changes in every field of industrial effort?

How interesting this program appears when read in connection with Mr. Sidney Webb's address to the Royal Institute of British Architects. In both there are indicated the forces, which will hasten the application of democratic principles to the discharge of the architect's function, and will help to liberalize the architect's conception of his professional services. The building industry will not be immune to the influences that will work these changes. The broader understanding of the true relation of things will lead the architect and the contractor to consider what are their proper functions and what should be their relationship to each other and to the building owner, in order that buildings may be well and economically built.

It is becoming increasingly evident that one change, at least, will be in the function and status of the contractor, and consequently in the terms of the contract. This is not altogether a matter of future development. For some years contracts have occasionally been based upon the cost of the work plus a percentage. The number of such contracts has increased as the advantages to the owner, to the contractor, and to the architect have been more and more thoroughly understood. Nearly all of the Government's emergency construction work has been done under the "cost plus" form of contract; and on every hand contractors are now questioning the wisdom of accepting contracts on any other basis.

It is claimed that the Government could not, in the circumstances, have obtained contractors' services on any other terms. That is probably largely true, and constitutes one argument for the "cost plus" contract. Contractors would have been unwilling to "sell short" in such quantities of labor and ma-

terials on a rising market. The fact that there has been justifiable criticism of the appalling cost of the Government's work under "cost plus" contract should not close our minds to the real advantages secured in time and in good will. Whatever the immediate results may be of the Government's contract policy, the ultimate results will undoubtedly be a vast increase in the number of building operations conducted on the "cost plus" basis. The differences between conditions surrounding work during wartime and in times of peace are differences only in the degree of the future's uncertainties. These uncertainties in regard to the costs of materials and labor are always present and involve the contractor, who signs a fixed sum contract, in speculations and in the consequent assumption of risk, against which he will always try to protect himself. The contract of the future will undoubtedly be based upon cost—not estimated cost, but actual cost.

Contractors are going to emerge from the economic revolution through which we are passing, with a fixed idea that their time has a specific market value; that they are entitled to render services profitably, not over a period of a year or two years or more, but on each undertaking. They are going to ask themselves and their building owners, why one job should be made to absorb the losses on another; or why an owner should be deprived of his right to a full return of value in quality of work and quality of services for his investment, in order that the contractor may make a profit, although the cost of the work is more than he reckoned and had consequently consumed his anticipated service fee. The owner has better grounds than the contractor for discarding the lump sum contract, and one of the things which the architect ought to do is to convince him of this fact.

We venture to assert that the time is not very far distant when the architect's services will be rendered for cost plus a predetermined lump sum or per diem fee; and the contractor's services will be secured on the same or similar terms. Under such conditions of employment, the contractor will be relieved of the necessity of grinding down his costs to save his profit irrespective of his employer's interests. He may devote more of his skill and energy to securing and delivering better work; to making his services more valuable to his employer, who becomes his client. His whole attitude of mind will undergo a change, and he will understand that his larger success depends on a satisfactory service record. His reputation will be worth what it costs in effort and enterprise, and the "shoestring" contractor will disappear from the field.—"American Institute of Architecture Journal."

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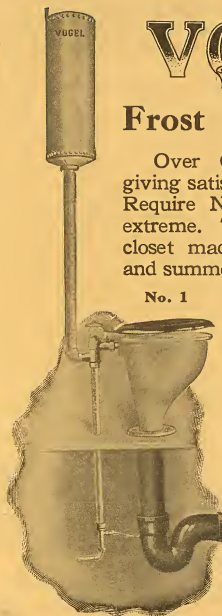
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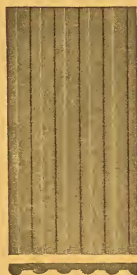
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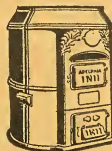
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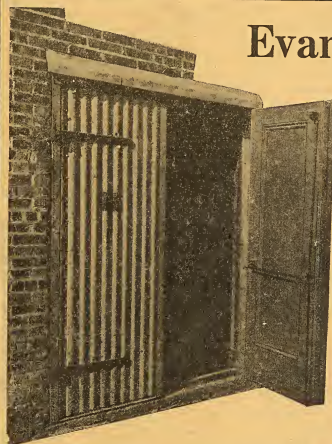


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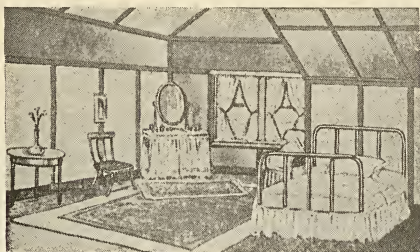
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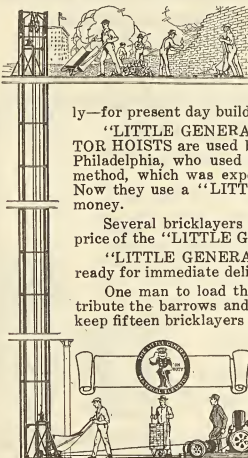
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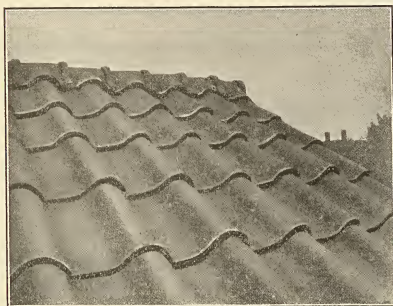
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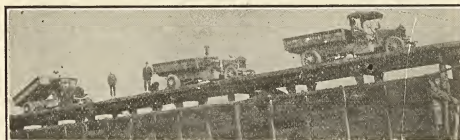
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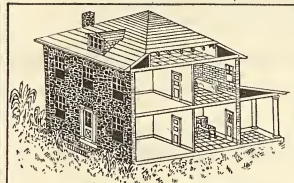
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Devoted to the Advancement of American Architecture, Structural

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Number 13

Engineering and the Building Trades

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As The Editor Sees It



AMERICA is at last awake to the necessity of adequate housing conditions for her working classes.

There have, for some years, been legislation toward this end, and isolated attempts on the part of manufacturing concerns to provide better housing facilities for the masses. Never before, however, has the whole country, from employer to settlement worker, been aroused to the nation's need in this respect.

It is claimed that factory and munition workers are sadly lacking in patriotism. Should it be a matter for wonder that people whose vision from childhood has been clouded by the four walls of a poorly lighted, poorly ventilated tenement, are incapable of appreciating the glories of our great democracy?

These are not socialistic sentiments. Proper housing facilities, attractive, well built homes, can be given the workman, without financial loss to the community. The benefits derived therefrom in the way of better citizens and more efficient workmen affect the nation as a whole.

Why, then, do such conditions exist in America?

In the *New York Evening Mail* there recently appeared the following:

To the directors of the title and mortgage companies of the city of New York:

We have printed a series of articles

dealing with the practices of the title and mortgage companies of New York.

Less than three centuries ago Peter Minuit bought for \$24 the island of Manhattan.

A century ago all the land in Manhattan could have been purchased for less than \$100,000,000.

To-day the land and improvements of the city of New York are assessed in excess of \$8,200,000,000. This is as much almost as all the wealth of the kingdom of Spain and the republic of Switzerland combined.

When our public records were deficient your companies inaugurated a private system of real estate recording. Out of that system you have created a monopoly which practically controls the financing and the marketing of real estate in this imperial city and through which much of the building operations must be handled.

You have created a condition whereby capital does not consider its investment secure unless titles are insured by your title corporations or mortgages safe unless guaranteed by your mortgage companies.

You have employed great legal talent. You have your agent in Albany to look after your interests in the legislature. You have had amazing success.

You have by agreement between the five title companies established what substantially is a monopoly—a monopoly of tremendous value in New York.

The increase in real estate values are, to a degree, under your control. If you decide that a certain section of the city warrants development you can shape matters so there will be development there. You appreciate, of course, that you do not create these values. Each new building enhances adjacent property and land values. The values come from the rent-paying population; from the desire of people to live and do business there. That rent capitalized is land value.

Some officers of your companies are reported to have been dealing in a large way for their private profit in the development of sections that the growth of New York made part of the greater city. The public has an idea that these "dreamland" prospects have taken good care of their personal interests, while the interests of the public have not been conserved so well.

You have great influence in relation to building operations. It is reported that you have your own architects and your own corporations for building important structures; your own contractors and your favorite building supply houses. So far as this is a measure of precaution for good construction and sound values to buttress your mortgages it is a good provision, but when it is merely a means for obtaining another profit then it must command itself to the merit of superior service.

The public feels that you are wielding

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tremendous power, too great a power to be used without a sense of responsibility to the public.

It is within your power to outline the future map of New York. The streets you plan are the streets people will have to travel for 100 years to come. The structures you build or accept as the ones upon which you will lend money are the structures in which people now unborn must live and work.

You shape the homes for the present and the future generations of New Yorkers.

And to whom are you responsible, you who have taken to yourselves this right, and a monopoly of this right?

We are living in a wonderful age—an age of steel and concrete. Within one office structure 10,000 persons are housed under conditions of light and air, sanitation and conveniences for wholesomeness never known to people before. These structures are monuments to the genius of our Cass Gilberts, our Carriers, our Flagg and other master architects.

Our skyscrapers are the marvels of the world in building technique. But within a stone's throw of these majestic piles are the hovels of the very poor where people live under conditions that disgrace our civilization and shame our government. No architect is there to plan for light and air and wholesome conveniences for the multitude in the habitations in which the multitude must live. No body of men ever has used power, except in a disjointed way, to correct this terrible wrong.

There has been no real housing plan worked out for the great mass of the toilers of this mighty human hive. No one saw that a Cass Gilbert gave to this pressing subject of their living conditions a spark of the genius of which he has shown so much.

There has been little thought of the value of human life. There has been no thought of the helpless whose only privilege it has been in this city of nearly 50,000 tenements to live in structures with sunless airshafts, in structures where women work out their whole existence tending children deprived even of the light and the air, God-given heritages without which they must sicken and suffer and wither and many die.

These people are helpless if leadership does not look after them.

They are helpless pawns in the great chess game of which you are the master players.

Why don't you use your power to bring them the benefits of our civilization?

Pedagogic biologists have told us the function of play is a basis of the child's

growth, yet in the homes of the poor there is no place for play.

The most important thing in a city is how the multitude lives, yet the talent of our architects is spent on cathedrals and museums, on business palaces and on railroad and factory technique.

You have it in your power by including social policies in your plans to bring to the masses of New York the benefits of the civilization of which they are a part.

You have failed to do this.

So long as you have not done so you have not justified the power of trusteeship you have assumed and you must be looked upon as usurpers.

When the Fifth Avenue movement began some years ago you were appealed to. What was your decision?

It was that it would be a good exercise of your power to protect the beauty of New York's most fashionable thoroughfare.

Several years ago when the subway was opened to the outlying boroughs appeal was made to you by the owners of decayed tenements whose structures were being deserted by people eager to get to sections where they could find better habitations, where they could obtain light and air in plenty and have sight of trees and grass. To protect the mortgages on these tenements you shut down on suburban development. You closed to the tenement dweller the avenue of escape.

The protection of some mortgages had to be weighed against human life.

The city invested a huge sum in the rapid transit system, but the people couldn't take full advantage of it because you willed otherwise; because you wanted to conserve your own particular interests.

Six or seven hundred years ago the basis of feudalism was laid in Europe. The overlord looked after the welfare of his people. They paid tithes to him. He in turn had to care for them for life. Gradually, as time went on, the feudal lords forgot their obligations, but did not forget to levy their charges. Tithes became toil. The French revolution came, and with it anarchy. The inflamed people drove out all leaders, classing good and bad alike. Everything had to go. The whole social system was destroyed because the trustees of the people had been blind, unfaithful to their obligations.

The mutterings of a new discontent are growing. A new spirit of human brotherhood is moving in the world. As in the French revolution, no man who dressed *sans culotte*, as did the old aristocracy, was tolerated, so in Russia today we are told the white collar is taboo and only he can take part in council who

wears the costume of the common workmen. Such is the disgust that exists in Russia for the old bureaucracy that lived on the people and neglected its duties to them.

What will happen to American leadership unless it lives up to its responsibilities?

The voices of discontent grow louder and louder.

Three hundred thousand children in New York are so seriously undernourished that their health is vitally impaired for life.

And this in the proudest and richest city on earth!

Capital must live up to its obligations.

You might have done much for the good of the masses of New York, but you have not thought of them.

You might have made it possible for home-makers to buy homes and make homes and pay for homes under amortization conditions that would give to you a proper profit and give to the home-maker an opportunity to live and prosper and raise family in comfort and decency.

You might have centered upon the housing problem the minds of men of genius and planned for better homes, better surroundings, better health and better living for the city's millions.

You might have put upon the mortgages you guaranteed the stamp of the master security it would be if you stood for justice to the people; if your mortgage meant that back of it was property representative of the highest civilization, the best purpose, the highest social justice in the world.

You might have profited more if your aim and your pride had been in how low the interest rate at which money was secured from capitalists for the home-builders instead of how high your interest return.

You might have profited more if you thought less of commissions, charges, bonuses and all sorts of inflictions, and more of the rights of the people who came to you because you held the city in your monopolistic grasp.

Your underlings have asked your protesting patrons: "Do you suppose we make our money out of 6 per cent. interest?"

Your corporations have been selfish. They have not used their power for the common good.

Americans are not ungenerous to worthy leaders.

No one has anything but praise for Henry Ford, yet he made \$50,000,000 profit in one year. But he was fair, generous. He paid his men well for their labor. He gave to his customers the best car in the world for the price, and

he aims and strives to reduce the price to them.

He realizes his responsibility to the people.

Such leadership will endure.

But the leader who shirks responsibility to the public is simply the usurper who levies toll.

Worse than that. He endangers the whole structure of capital and corporate management. Revolutions are born of the resentment engendered when the trustees of leadership default in their duty.

Commenting on this indictment, Milton B. Medary, Jr., writes in the *Journal of the American Institute of Architects*:

... "That there is truth in the *Mail's* arraignment probably cannot be disputed, but to ascertain the degree of that truth is a necessity which transcends the importance of any other question except the prosecution of the war. We are made to feel, as architects, the strangling hand upon the profession through which we are striving to make our contribution to human betterment and progress. We cannot but see ourselves as the silent partners in this process which throttles life and art at the same moment. We see ourselves stripped of every vestige of power to make our profession of use to the majority of mankind, and consigned, . . . to remain the servants of the rich.

"Therefore this indictment must be our own intimate concern. We must open our eyes to the fact that by no matter what circumstances we are reduced to that impotency against which so many architects are now protesting, we cannot throw off those shackles until we, too, are free to offer architecture as a great department of human service. It is in these fields that we must seek the answer to that eternal childishness which prompts us forever to lament what we so glibly term a lack of appreciation by the public. How can the public appreciate architecture when the great mass of it is debarrd from any more of the benefits which it has to confer than an occasional contact with some grandiose structure?"

The facts of the case are not pleasant to consider. Americans must always feel ashamed that the money god is set before public good in this great democracy. And yet, it is, in great measure, the increased importance of the workingman to the moneyed interests that has so aroused the nation at this time. Employers realize that under the old unhealthy, uninspiring conditions, the workingman cannot produce most satisfactory results.

The question next arises as to what sort of legislation, what sort of financial scheme can accomplish the desired results. The subject is most ably taken up in the *Journal of the American Institute of Architects* by Edith Elmer Wood under the title—"What Is a House?"

Constructive Housing Legislation is that type of housing legislation through which the community itself undertakes to provide suitable homes at cost for such of its citizens as need them. The community may act either directly or indirectly. Municipal housing is direct. The loan of public money to a housing association is indirect. Both are constructive.

Restrictive housing legislation is that form which seeks to prevent the erection of bad houses through the establishment and enforcement of minimum standards of light, air, sanitation, and safety. It may also prevent filth and dilapidation by establishing and enforcing minimum standards of maintenance.

The best restrictive legislation is only negative. It will prevent the bad. It will not produce the good. Especially, it will not produce it at a given rental. Its only answer to a house-famine is the relaxation of its own standards. This was strikingly illustrated in San Francisco after the earthquake and fire of 1906. Instead of taking advantage of the wonderful opportunity presented to rebuild the congested districts on model lines, the need of immediate shelter was so great and private capital so timid that all bars were let down and even the inadequate restrictions of the old building code were suspended. The result was that tenements sprang up, covering 100 per cent. of the lots, and a dark-room problem was created which it will take a generation to solve.

A high standard of restrictive legislation will not be enacted, or, if enacted, will not be enforced, when its enforcement would leave a considerable number of people homeless. On the other hand, restrictive housing legislation must not be neglected. The manufacture of new slums must not be allowed to continue, nor would the building of new and good houses in itself cause the abandonment of the objectionable old ones. It would only cause their rents to drop, and there would always be a residuum of persons, who, through misfortune, providence, or excessive thrift, would choose them for their cheapness so long as their occupation was permitted. Effective progress, then, demands a simultaneous and correlated development of both constructive and restrictive housing legislation.

Restrictive housing legislation has at-

tained as high a level of development in some parts of the United States as is, perhaps, possible in the absence of its working partner. The New York Tenement House Law is the first of the modern type, and remains one of the best. It is certainly one of the best enforced.

Let us take from New York's experience one single example of the limitations of restrictive legislation. The New York Tenement House Commission of 1900, whose recommendations resulted in the enactment of the present law, expressed its regret that it was not possible to insist on air-shafts being put in old houses with dark rooms, because the expense would lead owners to turn their houses to other uses. "Reforms of such a kind," the report goes on, "would harm most the very persons it sought to aid." So the law requires of dark rooms only that windows shall be cut into adjoining rooms. According to the report of the commission, there were, in 1900, some 350,000 such dark rooms in greater New York. To-day, in the language of the Tenement House Department and the press, there are none. But this means only that the cutting of windows into adjoining rooms has been completed.

The old apartments built before the Tenement House Law of 1879, which required air-shafts, were three and four rooms deeps. One room had windows on street or back yard; the others were a series of closets of increasing darkness. The doorway from one to another was the only opening. Of course, the windows cut in the partitions between the rooms add somewhat to the possibility of ventilating them. But the rooms are still unfit for human habitation by any proper standard. Half a million people are living in those rooms to-day. What sort of citizens will the generation make that was born and bred in them?

After fifteen years of operation of the New York Tenement House Law, about three million people, including practically the whole of the unskilled wage-earning class, are still living in old-law tenements. On December 31, 1916, there were 77,604 old-law tenements in New York containing 597,955 apartments. There were at that time 27,149 new-law tenements with 378,442 apartments. Nor may we look forward hopefully to the gradual elimination of the old tenements and the substitution of the newer and better type; for, as was stated by a representative of the New York Tenement House Department at the National Housing Conference in November, 1916, the building of cheap tenements in New York has ceased.

Unless wages of unskilled workers can

be practically doubled without rents being raised, which is clearly impossible under present conditions, the outlook for this great class of the population in New York City, under existing legislation, is dark now and will become increasingly so, as the cheap old-land buildings disappear.

What is true in New York is true of other American cities. Their housing problems do not differ from those of New York in kind, but only in bulk.

Mr. John Nolen ("Industrial Housing," Proceedings of the Fifth National Housing Conference, 1916, p. 5) is responsible for the following striking juxtaposition of facts: The simplest acceptable standard of American home, whether single cottage in village or suburb, or wholesome apartment in a large city, costs on an average from \$1,800 to \$2,000 per family, including land and improvements. This means, on a basis of moderate commercial profit (5 or 6 per cent.—and capital will not be invested for less), a rent of \$15 a month at the least. It is generally accepted that not more than 20 per cent. of the family income should go for rent; yet more than half of all the workingmen in the United States receive less than \$15 a week.

What are we going to do about it? Lower the standard? Increase wages without increasing rents? Or eliminate the commercial profit? We are up against a stone wall whichever way we turn.

Here is where the experience of the older nations is useful to us. They came to the same stone wall a quarter of a century ago, and they found a way through. It did not lead into paradise. Indeed it only set them on a road. But it took them past the stone wall, and the road points in the right direction.

THE EXPERIENCE OF FOREIGN COUNTRIES.

Constructive housing legislation has developed along four main lines, of which three may be said to involve Government aid of a positive sort and one of a negative.

1. Direct community action. The State, or more usually the city, buys land and builds houses for working people, either in the city itself or in garden suburbs. It may rent them and remain a landlord. Or it may sell them to the tenants on a system of long-term, easy payments.

2. The State may lend money at a low rate of interest to non-commercial building associations, whether of a philanthropic character, or co-operative or co-partnership societies formed by the workingmen themselves.

3. The third type has so far produced fewer houses than either of the others, yet would probably appeal more quickly to most Americans. It is the loan of money on favorable conditions to the individual workingman who wishes to build a home. It may be done through the intermediary of a loan company, as in Belgium, or directly, as under the surprisingly simple and efficient system of New Zealand and Australia. Yet, appealing as the type is, and useful as it is within certain limits, it must be admitted that it does not reach—cannot reach—the class that is in most urgent need of help—the unskilled wage-earners of large cities.

4. Finally, there is the negative, yet often important, aid rendered by tax exemptions on houses of approved standard and rental. The function of this type is auxiliary.

Some countries have developed one or two, and some have all four types of government aid. It has depended somewhat on a diversity of local needs, but more on national habits of thought. The accident of locality has contributed largely, for, other things being at all equal, the example of a near neighbor is most likely to be followed.

Three nations stand out as pioneers in constructive housing legislation—England, Belgium, and Germany. These distinctively industrial nations, whose cities grew with unexampled rapidity during the nineteenth century, were naturally the first to feel the pressure of housing problems."

Mrs. Wood then gives a detailed account of the various types employed in the above-mentioned countries, which is too long to print here.

One or two interesting excerpts follow:

The Belgians have the honor of having produced the earliest effective national constructive housing law—that of 1889—and, up to the present time, one of the best.

Municipal housing is permitted under the Belgian law, but has not been developed to any extent. Building societies and individual workingmen have been the active agents, the individual workingmen through the intermediary of non-commercial loan associations. The Savings Bank was at first permitted to loan only 5 per cent. of its funds, but when this limit was reached in 1901, it was raised to 7½ per cent. The interest charged at first was only 2½ per cent., but was eventually increased to 3½ per cent.

The individual workingman may borrow not to exceed 5,000 francs on a house and land, the combined value of which does not exceed 5,500 francs. He

may borrow for periods of from five to twenty-five years. His payments may be monthly or yearly.

One of the most interesting features of the Belgian law is the insurance plan devised by M. Leon Mahillon, managing director of the General Savings Bank. A workingman borrowing to build a home takes out a policy on his life for the unpaid portion of his loan. Should he die before the payments are completed, the balance of the debt is canceled by the policy, and his widow receives the house unincumbered. The Savings Bank underwrites the insurance itself. This feature of the law has been very widely copied.

Up to 1913 the General Savings Bank had advanced 159,012,589 francs to the various types of societies, and about 57,300 dwellings had been built in consequence. This must have meant the housing of about 300,000 people. On Jan. 1, 1913, there were 176 associations having loan contracts with the bank, of which 167 were joint stock and 9 co-operative. All of the co-operative and 125 of the joint stock organizations were loan companies, only 42 being building societies.

The philanthropic societies have not been active since 1907, but the co-operative and co-partnership societies have been extremely so. On the other hand, some of the philanthropic and co-operative societies may have received no public loans. Balancing these two unknown quantities against each other, with the statement that the credit item is likely to be larger than the debit, we are pretty safe in saying that over half a million people in England to-day owe their comfortable homes to constructive housing legislation.

Results, in decreased death-rates and increased physical development, are very striking. For the year ending March, 1912, the death-rate in the London County Councils' dwellings was 8.5 per 1,000, while for the whole of London, in 1911, it was 15 per 1,000 (U. S. Bureau of Labor Statistics, Bulletin No. 158, p. 307). Speaking of a slightly earlier period, Thompson says ("Housing up to Date," p. 46): "The death-rate in the model dwellings on cleared slum areas is under 13 per 1,000, or one-third of what it was in the old slums before clearance, viz., 40 per 1,000." At the time of which Thompson was writing the general death-rate in London was 15.6 (p. 75).

One of America's best answers to this problem exists in the housing development of the Octavia Hill Association, an account of which appeared in an early issue of THE GUIDE.

The recent development at Beloit,

Wisconsin, is of paramount interest at this time. These homes have been erected for employees of the Fairbanks-Morse Co., manufacturers of internal combustion engines and steam pumps. The outstanding feature of this enterprise is that it has been planned by a firm of skilled architects, Geo. B. Post & Sons.

The company contemplates the building of 350 houses of sizes varying from four to eight rooms and although only five different types have been used the architects have developed about forty different designs. The whole project has been planned with a view to the comfort and well-being of the inhabitants, including besides these attractive homes, an athletic field and park. In fact, the development is distinguished by all that formerly was lacking in workmen's housing projects.

We are glad to learn that the Philadelphia Chapter of the American Institute of Architects has appointed a com-

mittee composed of Milton B. Medary, John P. B. Sinkler and John Irwin Bright to devise a grand plan for the united development of the country along the Delaware River from Wilmington to Trenton. The dominant thought is to make this housing development an architectural achievement which will stand the test of time and which will be, to use Mr. Medary's words, their "contribution to human betterment and progress."

The committee will work in conjunction with any architect chosen to do work for this territory. It is now co-operating with Mr. Owen Brainerd in American International Shipbuilding Corporation housing scheme.

* * *

THE wisdom of advertising now is wonderfully clear to anyone reading Mr. W. M. Hart's article in *Photoplay*. So forceful, so concise and so beneficial will this article be that we reproduce it in full on another page of this issue of the GUIDE.

EDITORIAL NOTES

Richardson & Boynton Company, manufacturers of ranges, furnaces, boilers, etc., to provide greater facilities for taking care of increased business has removed its offices, sales and display rooms from 1342 Arch street, Philadelphia, to more commodious quarters, 1332 Arch street.

* * *

Professor Warren P. Laird, head of the School of Architecture at the University of Pennsylvania, will draw up new plans for the proposed bridge across the Delaware River from Philadelphia to Camden. He has been engaged by the Pennsylvania Bridge Commission, which met Friday in the office of Mayor Smith.

Professor Laird will make a special study of the requirements of such a bridge as is proposed. He will receive \$5,000 for his work. Tentative plans that have been drawn up by engineers of the New Jersey Commission provided for spiral approaches for the bridge, and Director of Public Works Datesman has said this type would be unsuitable on the Philadelphia side.

* * *

Major Guy Lowell, with architectural offices in Boston and New York City, was recently awarded the military "Medal for Valor" by the Italian Government. The award was made for distinguished work in connection with the American Red Cross on the Italian front.

* * *

Cogswell-Koether Company, building construction, announces that it has recently opened an office in the Vanderbilt Building, 51 East Forty-second street. William T. Sitt is now associated with this concern as vice-president and consulting engineer.

Leo Feinen, architect, 3697 Boulevard, Jersey City, N. J., has discontinued his offices for the period of the war and has entered the service of the Government.

* * *

H. Weiss & Co., for thirty years in Cliff street, New York City, have moved to 83 John street, where larger quarters enable them to handle everything in sheet metal machinery, etc.

* * *

There is being mailed to all architects throughout the country at the present time a standard specification form which should prove of great benefit to the tin roofing trade. Some little time ago Thomas Nolan, M. S., A. M., Fellow of the American Institute of Architects and Professor of Architectural Construction, University of Pennsylvania, conceived the idea of compiling a series of standard specification forms and condensed descriptions in permanent standard for filing; each one of the series to contain brief accurate data for specifying and using the building materials treated in that particular number; the series to be placed in the hands of some leading manufacturer for distribution among engineers, contractors and all interested in building.

It is a special tribute to tin roofing that No. 1 of the series should be devoted to this form of roofing. This number contains the standard specifications for tin roofing and for tin roofing work, and tells how a tin roof should be laid. There are some "Don'ts" for the tin roofer, and what is most important, some excellent suggestions on color for painting tin roofs to make them attractive and to get people away from the notion that a tin roof must be red.

In this series credit is given to the N. & G.

Taylor Co. for special data furnished for the text. This No. 1 of the series is being distributed free to architects through N. & G. Taylor Co., Philadelphia.

* * *

Merchant & Evans Company, Philadelphia, manufacturers of Evans "Almet" fire doors and shutters and the famous Star Ventilators, have issued a new catalogue which will be of invaluable assistance to architects, contractors, property owners, State and City Police and Safety Departments. The superiority of the Evans "Almet" fire door and fire shutter is obvious to any reader of the data published in this complete catalogue.

The importance of fire doors and shutters is clearly explained, as most fires are preventable and controllable. Specifications, similar to those agreed upon by the Pennsylvania Railroad Company and intended for early adoption by the United States Government are incorporated. A general description of Evans "Almet" fire doors and some facts about them are interestingly portrayed. Noteworthy is the fact that in addition to approval of the Underwriters' Laboratories, Inc., Chicago, and the Boston Laboratories, the Evans "Almet" fire doors and fire shutters have over two hundred approvals from prominent officials directly interested in fire protection and prevention affairs, thus constituting a far greater number and a better class of approvals than extended to the manufacturers of any other fire doors on the market.

The catalogue contains pages of data necessary for the proper installation of fire resistant and fire proof appliances. Some of the subjects are: Cord arrangements for fire doors, erection data, tables for areas, wall bolts required, regulations of National Fire Protection Association, a long but only partial list of users of Evans "Almet" fire doors and fire shutters. A large variety of illustrations and installations show the many applications and uses for Merchant & Evans Co.'s products, including the Star Ventilators, "Merchant's Old Method" roofing tin, "Merchant's" metal tiles, etc.

Everyone interested in any phase of buildings or building construction should write for a copy of this most valuable catalogue.

Statement of the Ownership, Management, Circulation, etc.

Statement of the ownership, management, circulation, etc., of *The Builders' Guide*, published weekly at Philadelphia, Pa., required by the Act of August 24, 1912, for March 20, 1918.

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(Signed)

Building News Publishing Co.,
Louis S. DeLone, President.

Sworn and subscribed before me this 14th day of March, 1918.

Edward J. Toole, Notary Public.
(My commission expires Jan. 21, 1921.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Garage, Forty-eighth and Chestnut streets, Philadelphia, \$40,000. Architect, A. H. Hartman, Liberty Building, Philadelphia. Owner, J. W. Peoples, Pennsylvania Building, Philadelphia. Brick, 1 story, 100x215 feet, composition roof, cement floor, steam heating, electric lighting. Architect will sub-let.

Residence (alts. to Bank), 6328 Vine street, Philadelphia. Architect, Frank B. Hahn, 1112 Chestnut street, Philadelphia. Owner, Frank Di Bernardino, on premises. Consists of general interior alterations. Architect taking bids, due April 1st. Smith-Hardican Co., 1606 Cherry street; F. A. Havens & Co., 845 North 19th street; Frank G. English, 1610 North Carlisle street; Fred Sbogolia, 730 South Tenth street; Frank Delotta, southeast corner Seventh and Christian street; Vargilio Cerasalo, Thirteenth and Christian streets; Nicholas Nardy, 763 South Thirteenth street, are figuring.

Sales and Service Building, 1641-43 North Broad street, Philadelphia. Architect, Le Roy B. Botschli, Bulletin Building, Philadelphia. Owners, Kahn & Greenberg, Morris Building, Philadelphia. Limestone, 2 and 1 story, 165x64 feet, outlet on Park avenue, 16x75 feet, slag roof, electric lighting. Plans about completed. Architect will be ready for bids in five days.

Residence and Shop, northwest corner Lawrence and York streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, stone and slate, 2 stories, 16x51 feet, slag and tin roof, stone foundations, hot water heating, electric lighting, tile work, plumbing, hardwood floors, cement work, cabinet work. Plans in progress. Architect will take bids in two weeks.

Bungalow and Garage, Roxborough, Philadelphia. Architect, Herman Miller, Crozer Building, Philadelphia. Owner, Wm. Aman, 342 North Forty-second street, Philadelphia. Stone, 2 stories, 42x54 feet and 30x30 feet, Spanish tile roof, hardwood floors, hot water heating, electric lighting, tile work. Architect has received bids.

Operation of Twin Residences, Frankford, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick and stucco, 2 stories, 16x50 feet, slate and tile roofs, stone foundations, hot water heating, combination lighting, tile work, hardwood floors. Plans in progress. Will be ready for bids in two weeks.

Office Building and 8 Individual Garages, Sixth and Rockland streets. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Stone and brick, one story and basement, slag roof, hot water heating, electric lighting, hollow metal skylights, roof ventilators, cement and pine floors. Plans in progress. Will be ready for bids in two weeks.

Factory (add.), Fiftieth and Elm avenue, West Philadelphia. Architects, Andrew J.

Sauer & Co., 908 Chestnut street, Philadelphia. Owners, Cunningham Piano Co., 1101 Chestnut street, Philadelphia. Reinforced concrete and steel, 52x62 feet. Plans in progress. Architect will be ready for bids in about one week.

Garage, northeast corner of Twenty-second and York streets, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, R. A. & J. J. Williams, on premises. Brick, 1 story, 23x100 feet, slag roof, stone foundations, hot water heating, electric lighting, cement floors, hollow metal sash and skylights (gasoline storage system reserved). Plans in progress. Architects will be ready for bids in two weeks.

Office Building, Richmond street, Philadelphia. Architect, private plans. Owners, the Wm. Cramp & Sons Ship and Engine Building Co., Beach and Ball streets, Philadelphia. Brick, stone and reinforced concrete, 9 stories, 14x50 feet, tile roof, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash, hollow metal doors, iron stairs, ornamental iron work, mosaic, pine and cement floors, hollow tile, elevators, waterproofing, wire work. Owners taking bids, due March 27th. Warren-Moore Co., Colonial Trust Building; Wm. Steele & Sons, 34 South Fifteenth street; Stacy Reeves & Sons, 2011 Market street; A. R. Raff Const. Co., 1635 Thompson street; Doyle & Co., 1519 Sansom street; Cramp & Co., Denekla Building; F. E. Wallace, 1220 Chancellor street; Jacob Myers & Sons Co., Witherspoon Building, and H. E. Baton, 1713 Sansom street, Philadelphia, are figuring.

Club House (add.), 635 Webster street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Rafael Palma, on premises. Brick, 1 story, 16x54 feet, slag roof, stone foundations, yellow pine floors, plumbing, electric lighting, hollow metal skylights. Plans completed. Owner ready for sub-bids.

Stable and Garage, Eighteenth and Dickinson streets, Philadelphia. Architect, private plans. Owner, W. O. Scott, 1826 Dickinson street, Philadelphia. Brick, 2 stories, 65x48 feet, slag roof, cement and pine floors (heating, plumbing, lighting and elevator reserved), cement and pine floors, metal lath, metal partitions, waterproofing, wire work, ornamental iron work. Owner taking bids, due as soon as possible. Smith-Hardican Co., 1606 Cherry street, is figuring.

Building (alts.), 136 Chestnut street, Philadelphia. Architect not yet selected. Owners, Industrial Requirements Co., 136 Chestnut street, Philadelphia. Consists of new front, 4 stories, hollow tile, tile and glass. Work contemplated. Too early for details.

Factory (alts.), 434 and 436 North Third street, Philadelphia. Architect, W. Frisbey Smith, Broad and Arch streets, Philadelphia. Owners, Integrity Title Insurance, Trust and Safe Deposit Co., Trustees, Fourth and Green streets, Philadelphia. Brick, steel reinforcing

of floors. Owners taking bids. Paul Essick, 1345 Arch street; E. J. Kreitzburg, 1345 Arch street, and George Kessler Cont. Co., Drexel Building, are figuring.

Rear of 1911 Chestnut street (alt. and add.), Philadelphia. Architect, Addison H. Savery, Stephen Girard Building, Philadelphia. Owner, Joseph Habisreiter, on premises. Brick and concrete, 2 stories, 29x42 feet, slag roof, cement floors, stone foundations, electric lighting, fenestra sash, hollow metal skylights. Architect taking bids, due March 27th. Geo. K. Heebner, 1231 Vine street; R. C. Ballinger & Co., 218 North Thirteenth street, and Robert E. Lamb Co., 843 North Nineteenth street, are figuring.

Factory (add.), 709-11 Cherry street, Philadelphia. Architect, John V. Speth & Co., 1627 Sansom street, Philadelphia. Owner, James F. Burns, 715 Cherry street, Philadelphia. Brick, 5 stories. Plans in progress. Too early for details.

Store Building and Rooming House, 1306-10 South street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, stone and steel, stone foundations, 3 stories, 42x120 feet, slag roof, steam heating, electric lighting, yellow pine floors, cement work, hollow metal skylights, fire doors, fire towers, flush bulks. Revised plans in progress.

Garage (add to School), 924 Spring street, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Philadelphia. Brick, 1 story, 48x14 feet, composition roof, cement floors, concrete foundations, extension to steam heating system. Owners ready for bids, due April 4th.

School (int. alts.), Twelfth and Locust sts., Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Consists of interior alterations. Owners will take bids, due April 4th.

Residence (alts. to Chapel), 2100 East Ontario street, Philadelphia. Architect, H. G. Hammer, 808 North Seventeenth street, Philadelphia. Owners, St. Rocco's Chapel, care of Rev. Cosmas Bruni, 4330 Paul street. Excavating, stone foundations, addition, 2 stories. Brick, 15x20 feet, slag roof, yellow pine floors, mill work, galvanized iron cornice, plumbing, hot air heating, electric lighting, plastering, painting and glazing. Architect will build and is ready for sub-bids on all lines.

School (alts.), Fifty-seventh and Haverford avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Stone, brick and reinforced concrete, 3 stories and basement, composition and slate roof (steam heating and electric lighting reserved), copper roof, cement, maple, mastic and asphalt roof, hollow tile, metal

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lath, hollow metal skylights, fire doors, fire escapes, roof ventilators, metal weatherstrips, metal ceilings, wire work, ornamental iron work. Owners taking bids, due April 4th. Edw. Atkins, 249 South Twenty-fourth street; Mitchell Bros., 2125 Race street; Standard Const. Co., 1713 Sansom street; William E. Dougherty, 1610 Sansom street; Thomas C. Trafford, 1613 Sansom street; Chas. McCall Co., 1713 Sansom street, and Ketcham & McQuade, 1029 Brown street, are figuring.

Lunch and Wash House, Machine and Blacksmith Shop, Richmond and Kennedy streets, Philadelphia, \$10,700. Architect, private plans. Owners, Chas. Lenning Co., on premises. Concrete and hollow tile, 1 story, 27x55 feet, 60x70 feet, slag roof, cement floors. Owner will build.

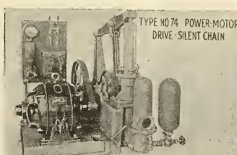
Hospital (alts.), 1743 North Fourth street, Philadelphia, \$4,500. Architect, private plans. Owners, John B. Stetson Co., Fifth and Montgomery avenue. Alterations to second floor, plumbing and plastering, steam heating, electric wiring. Owners will build.

Dwellings (5), Bingham and St. Vincent streets and K and Bleigh streets, Philadelphia, \$4,800. Architect, H. W. Myers, 5814 G street, Philadelphia. Owner, H. J. Klumpers, 220 East Westmoreland street. Frame, 2½ stories, 24x35 feet, tile roof, stone foundations, hot water heating, combination lighting, hardwood floors. Architect will sub-let all contracts.

Sales and Service Building, 1421 N. Broad street, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Heymann & Bros., Widener Building, Philadelphia. Stone front, brick, 2 stories, 25x160 feet, slag roof, cement floors, stone foundations, steam heating, electric lighting, tile work, cement floors, mill work, skylights, dumb waiters. Plans about completed. Architect will take bids in one week.

School (alts.), Twelfth and Locust streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. New partitions and mill work, maple floors. Owners ready for bids March 28th.

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phia. Architects, Owen Brainard and Carrere & Hastings, 52 Vanderbilt avenue, New York City. Owners, Emergency Fleet Corporation, J. Roger Flannery, chairman, 136 South Sixteenth street, Philadelphia. Brick and stucco, stone foundations, 2 stories and basement, 16x30 feet, Barrett and J-M asbestos shingle

roofs, pine floors, hot air heating, electric lighting, gas ranges, roof ventilators, water-proofing, ornamental iron work. Owners taking bids, due March 29th at 9 A. M. Warren-Moore Co., Colonial Trust Building, and Cramp & Co., Denekla Building, Philadelphia, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Garage, 838-40 Carpenter street, Philadelphia, \$10,000. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Michael Di Negro, on premises. Brick, 2 stories, 32x102 feet, stone foundations, slag roof, steam heat, concrete and plank floors, hollow metal sash and skylights, fire doors, metal ceilings, electric elevator, gasoline storage. Contract awarded to Cerasolie & Scurei, 1218 Catherine street.

Storage Building, Eighteenth and Sedgley avenue, \$9,000. Architects, Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia. Owners, B. H. Wheeler Manufacturing Co., on premises. Brick, 1 story, 40x63 feet, slag roof, cement floors. Contract awarded to Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia.

Warehouse and Office, Swanson and Beck streets, Philadelphia, \$6,800. Architect, private plans. Owners, Philadelphia Cresson Manufacturing Co., 848-50 South Swanson street, Philadelphia. Brick, 2 stories, 20x100 feet, slag roof, stone foundations, cement and pine floors. Contract awarded to Frank I. Wintz, 1618 North Twenty-seventh street, Philadelphia.

Inspector's Office, American and Luzerne streets, \$3,000. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Brick, 1 story, 17x30

feet, ready roofing, steam heating, pine floors. Contract awarded to F. A. Havens Co., 815 North Nineteenth street, Philadelphia.

Hall (alts. to Apartments), 4918 Baltimore avenue, Philadelphia. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owner's name withheld. Partitions, plumbing, electric work (heating separate bids), interior alterations, tile work, hollow metal skylights. Contract awarded to F. B. Davis, 240 North Sixteenth street, Philadelphia.

Store Building (alts.), northeast corner of Eleventh and Filbert streets, \$3,000. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, Harry C. Kahn, on premises. Consists of exterior and interior alterations, parquetry floors, tile and marble work, metal bulks. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Store Building (alts. and add.), 50 South Sixtieth street, Philadelphia. Architect, private plans. Owner, M. Drucker, on premises. Consists of renovation of entire property, 3 stories, two-story addition, brick, slag roof, parquetry floors, electric lighting, hot water heating, tile and marble work, skylights, flush bulks. Contract awarded to J. Gorchow, 4116 Girard avenue, Philadelphia.

Shop and Office, 2809 North Mascher street, Philadelphia, \$2,500. Architect, private plans. Owner, Joshua L. Wildey, 2817 North Mascher street, Philadelphia. Brick, 2 stories, 18x50.

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Pennsylvania Building

feet, slag roof, stone foundations, hot water heating, cement and pine floors. Contract awarded to John J. Friel, 3108 North Front street, Philadelphia.

Garage, 2012 South Broad street, Philadelphia, \$3,200. Architect, private plans. Owner, E. G. Kolb, Fifteenth and Snyder avenue, Philadelphia. Brick, 1 story, 90x34 feet, slag roof, hollow tile partition, cement floor, electric lighting. Contract awarded to Wm. J. Uhler, 1841 South Broad street, Philadelphia.

Garage, Columbia and Hancock streets, Philadelphia, \$6,000. Architect, private plans. Owners, H. S. Donaldson & Sons, Mascher and Columbia avenue. Consists of repairs to roof and brick work. Contract awarded to Doyle & Co., 1519 Sanson street, Philadelphia.

Garage, Collins and Westmoreland streets, Philadelphia, \$7,800. Architect, private plans. Owner, Ambrose Letters, Trenton and Westmoreland streets, Philadelphia. Brick and stone, 1 and 2 stories, 55x18 feet, 19x18 feet and 74x52 feet, slag roof, stone foundations, cement floors, electric lighting, rolled steel sash, hollow metal skylights, roof ventilators. Contract awarded to Barnes Bros., 2080 East Willard street, Philadelphia.

Temporary Office Building, Schuylkill Arsenal, Philadelphia, \$27,779. Architect, private plans. Owners, U. S. Government, care of Quartermaster's Department, Schuylkill Arsenal. Brick, 3 stories, 78x70 feet, slag roof, waterproofing, ornamental iron work (steam heating, plumbing and lighting reserved), pine floors. Contract awarded to Hogg Const. Co., 1634 Sanson street, Philadelphia.

You owe it to yourself to keep in touch with what is going on in the trade, and you can do this only by becoming a subscriber to and regular reader of your trade paper. If you are not a regular reader of the Builder's Guide you should be. The cost is not excessive. A five-spot insures it fifty-two times in the course of a year.

Business is founded on reciprocity and co-operation. Any other plan than this spells bankruptcy. The successful business nowadays has a heart and a soul.

PENNSYLVANIA

Construction News

Apartment House, Chester, Pa., \$300,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone and steel, 3 stories, stone foundations, 208 x 174 feet (240 rooms and 48 baths), slag roof, steam heating, combination lighting, tile work, pine floors. Plans in progress.

Apartment House, Chester, Pa., \$80,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone and steel, 3 stories, stone foundations, 120x77 feet (90 rooms and 18 baths), slag roof, steam heating, combination lighting, tile work, yellow pine floors. Plans in progress.

Apartment House, Chester, Pa., \$100,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone and steel, 3 stories, stone foundations, 216x103 feet (156 rooms and 30 baths), steam heating, combination lighting, tile work, slag roof, yellow pine floors. Plans in progress.

Garage, Clifton Heights, Pa. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner's name withheld. Brick (slow burning), 1 story, 40x20 feet, slag roof, steam heating, electric lighting, cement floors. Plans in progress. Architects will be ready for bids in a week.

Residence and Stable (alt. and add.), Elkins Park, Pa. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Chas. Silverman, care of architect. Hollow tile and stone, 3 stories, 48x30 feet, wing 28x26 feet; stable, 2 stories, stone foundations, slate roof, hollow tile (heating, lighting, tile and marble work and hardwood floors reserved. Architect has received revised bids.

Workingmen's Houses, Swedeland, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Alan Wood Iron and Steel Co., Widener Building, Philadelphia. Brick and stucco, 2 stories. Plans in progress. Too early for details.

Residence and Farm House (alt.), near Lyonnville, Pa. Architect, Ed. S. Paxson, 729 Walnut street, Philadelphia. Owner, Samuel Butler, West Chester, Pa. Consists of general interior alterations, stone, 2 stories, mill work, water system, new studio contemplated. Owner is taking bids.

Garage, Ardmore, Pa. Architect, Frank Seeburger, Pennsylvania Building, Philadelphia. Owner, John W. Klemm, Ardmore, Pa. Stone and half timber, 1½ stories, 20x25 feet, shingle roof, cement floors, hot water heating, electric lighting. Architect has received bids.

Apartment House (alt. and add.), 342 North Tenth street, Reading, Pa. Architect, W. A.

Fink, 426 Franklin street, Reading, Pa. Owner, J. E. Grill, Eleventh and Court streets, Reading, Pa. Brick, 3 stories, 22x80 feet, slag roof, hot water heating, electric lighting, pine floors. Architect taking sub-bids.

Time Office for Steel Foundry, Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., care of Mr. Tobias, P. A., Bethlehem, Pa. Frame, 1 story, 20x18 feet, composition roof, pine floors. Plans in progress.

Residence, Bethlehem, Pa. Architect, A. W. Leh, South Bethlehem, Pa. Owner, William Klotz, Bethlehem, Pa. Brick, 2 stories, 41x30 feet, shingle roof, hardwood floors, electric lighting, heating undecided. Plans in progress.

Residence (alts.), Bethlehem, Pa. Architect, J. M. Green, Jr., Bethlehem Trust Building, Bethlehem, Pa. Owner's name withheld. Brick, general interior alterations, 3 stories, hot water or vacuum heating, electric lighting, tile work. Plans in progress.

Residence, Bethlehem, Pa. Architect, J. M. Green, Jr., Bethlehem Trust Building, Bethlehem, Pa. Owner, J. M. Green, Jr., Bethlehem Trust Building, Bethlehem, Pa. Frame, 2 stories, 31x26 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Owner will sub-let.

Residence, Bethlehem, Pa. Architect, J. M. Green, Jr., Bethlehem Trust Building, Bethlehem, Pa. Owner, H. J. Magee, Bethlehem, Pa. Frame, 2 stories, 36x22 feet, shingle roof, hot water heating, electric lighting, hardwood floors. Plans in progress.

Residence, Bethlehem, Pa. Architect, J. M. Green, Jr., Bethlehem Trust Building, Bethlehem, Pa. Owner, H. J. Magee, Bethlehem, Pa. Stucco, 2 stories, 24x44 feet, slate roof, hot water heating, electric lighting, hardwood floors. Owner taking sub-bids.

Band Hall, 805 Buttonwood street, South Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owners, First Hungarian Band, care of architect. Frame, 1 story, 50x70 feet, rubberoid roof, maple floor. Owners taking bids.

Residence, Church street, between Main and New streets, Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem, Pa. Owner, E. A. Noiser, Bethlehem, Pa. Brick and shingle, 2 stories, 33x43 feet, slate roof, hot water heating, electric lighting, hardwood floors. Plans in progress.

Silk Mill (add.), Emaus, Pa. Architect, private plans. Owners, Zollinger Silk Co., Emaus, Pa. Brick, 1 story, 60x130 feet, slate roof, concrete and wood floors. Owners are taking bids. Butz & Clader, and H. W. Gangewere, both of Allentown, Pa., are figuring.

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Auto Truck Delivery to Philadelphia

Freight Station, South Bethlehem, Pa. Architect, private plans. Owners, Lehigh Valley Transit Co., Allentown, Pa. Brick, 1 story, 59x79 feet, concrete and wood floors. Owners taking bids, due April 1st. Butz & Clader, Ochs Const. Co., and H. W. Gangewere, all of Allentown, Pa., are figuring.

Generation Plant, Allentown, Pa. Architect, private plans. Owners, United Gas Improvement Co., Allentown, Pa. Reinforced concrete, 1 story, 17x60 feet, corrugated iron roof, concrete floors. Owners taking bids. Butz & Clader, Allentown, Pa., are figuring.

Residence, Fourth and Wyndotte streets, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway. South Bethlehem, Pa. Owner, Dr. Charles H. Wilkinson, Bethlehem, Pa. Stucco, 2½ stories, 32x28 feet, slate roof, pine floors, hot water heating, combination lighting, tile work. Architect taking bids, due April 1st. Mr. Thiel, Mr. Garber, Howard Stott & Son, Bjork & Blom, all of Bethlehem, Pa., are figuring.

Residence (alts. to Apartments), Lansdowne avenue, Lansdowne, Pa. Architects, Haeoek & Hokanson, Bailey Building, Philadelphia. Owner, W. F. Kennedy, Lansdowne, Pa. Frame, 3 stories, 20x20 feet, tin roof, hot

water heating, electric lighting, tile work, pine and hardwood floors. Revised plans in progress.

Residence, Pottstown, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, E. D. Gudebrod, Pottstown, Pa. Stone and stucco, 2½ stories. Plans completed. Architect ready for bids.

Bungalow, Oakland Park, Delaware County, Pa. Architects, Custer & Gill, Third and Market streets, Camden, N. J. Owners, Oakland Park Realty Co., Oakland Park, Pa. Frame, 1½ stories, 25x42 feet, shingle roof, pine floors, electric lighting (heating reserved). Plans completed. Owners will take bids in a few days.

Barn, near Newtown, Pa., \$10,000. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, J. J. Tierney, Newtown, Bucks County, Pa. Stone and frame, 2 stories, 100x100 feet, shingle roof, pine and concrete floors. Plans about completed. Architect will take bids in a few days.

Residence (alt.), Spring House and Pergolas, Yardley, Pa. Architect, J. O. Hunt, 144 N. Montgomery street, Trenton, N. J. Owner, Mrs. E. M. Yardley, Yardley, Pa. Stone and wood, 2 stories, tin roof. Plans in progress.

PENNSYLVANIA

Contracts Awarded

Garage, West Side, Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, Mrs. Iva Krause, Bethlehem, Pa. Brick, 1 story, 25x25 feet, tin roof, cement floors, electric lighting. Contract awarded to George Merdinger, Wilbur Trust Building, South Bethlehem, Pa.

Apartment Building (alts. and add.), Bethlehem Annex, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway. South Bethlehem, Pa. Owner, John Sallash, R. F. D. No. 3, Easton, Pa. Brick, 4 stories, 43x90 feet, general interior alterations, plumbing, mill work, plastering, electric lighting. Contract awarded to Butz & Clader, Allentown, Pa.

Boiler House and Chimney, Parkersburg, Pa., \$18,000. Architect, private plans. Owners, Parkersburg Iron Works, Parkersburg, Pa. Brick and concrete, 40x30 feet; chimney, 125 feet high, 5 feet diameter, concrete roof, cement floors, electric lighting, boiler settings. Contract awarded to Rust Eng. Co., Pennsylvania Building, Philadelphia.

Power Plant, Indian Creek and B. & O. R. R., Fayette County, Pa., \$35,000. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, Mountain Water Supply Co., Commercial Trust Building, Philadelphia. Reinforced concrete, hollow tile and stucco, 1 story and basement, 31x71 feet and 12x56 feet, slate roof, plastering, cement floors, hot water heating, electric lighting, rolled steel sash, hollow tile, metal lath. Contract awarded to the Rust Eng. Co., Pennsylvania Building, Philadelphia.

Garage, Loysville, Perry County, Pa., \$2,000. Architect, private plans. Owners, Atlantic Refining Co., 3155 Passyunk avenue, Philadelphia. Brick, terra cotta trim, 1 story, 29x26 feet, slag roof, cement floors, steam heating, electric lighting, roof ventilators, fire doors. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Residence (alts.), Quakertown, Pa. Architect, H. Rex Stackhouse, 129 South Fifth st., Philadelphia. Owner's name withheld. Stone, 2½ stories, 18x42 feet, interior alterations, hot air heating, electric lighting, tile work, new floors and electric water supply system. Contract awarded to Stoneback & Nace, Quakertown, Pa.

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New Jersey Construction News

Warehouse, 224-30 Walnut street, Camden, N. J. Architect, private plans. Owner's name withheld. Brick, 2 stories, 66x34 feet, ornamental iron work. Owners taking sub-bids, due as soon as possible. Barelay White & Co., 1713 Sansom street, Philadelphia, is figuring.

Public Bath and Swimming Pool, Atlantic City, N. J. Architect, Seward G. Dobbins, Atlantic City; N. J. Owner's name withheld. Concrete and hollow tile, 2 stories, 150x500 feet, concrete roof, tile floors, vapor heating, electric lighting, tile and marble work, rolled steel sash, roof ventilators, waterproofing, dampproofing, ornamental iron work. Architect taking bids, due April 2nd. Wilbur Beaumont, J. A. Bader & Co., and Wesley B. Poreh, all of Atlantic City, are figuring.

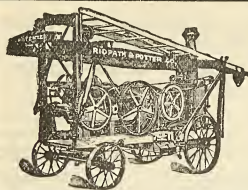
Garage and Cold Storage House, 51 Belview street, Trenton, N. J., \$8,000. Architect, Robt. Schuman, 932 Lamberton street, Trenton, N. J. Owner, I. Wagner, Trenton, N. J. Brick, 2 stories, 25x100 feet, slag roof, steam heating, electric lighting, hollow metal sash, fire doors, concrete floors, metal lath. Plans about completed. Architect ready for bids.

Hospital and Laundry Building, Trenton, N. J., \$90,000. Architect, Wm. Kleeman, Trenton, N. J. Owners, City of Trenton, Department of Public Affairs, care of Mayor Donnelly, Trenton, N. J. Brick, 1 story and 2 stories, 300x26 feet and 50x86 feet, slate roof, concrete floors, hollow tile, metal lath, elevators, safety treads, steam heating, electric light, tile and marble work, iron stairs. Owners taking bids, due April 5th 2:30 P. M. Harry Hilton, Chas. Smith, S. W. Mather & Son, Burton & Burton, Fred Parker, Elmer Stout, Samuel Wiley, and C. Y. Barlow, all of Trenton, N. J., are figuring. Leon D. Hirsch, City Clerk, City Hall, Trenton, N. J., taking bids.

Store (alts.), 831 Broadway, Camden, N. J. Architect, Thomas Stephen, Camden, N. J. Owner, Frederick Gereke, Camden, N. J. Brick, general interior alterations, 1 story, brick work and mill work. Architect taking bids, due March 27th. Lewis T. West, 828 Broadway, Camden, N. J., is figuring.

School, Glassboro, N. J. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owners, Board of Education, Glassboro, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet, slag roof (steam heat, electric lighting, plumbing and furniture reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamene doors, damp-proofing, ornamental iron work. Architects will take new bids shortly.

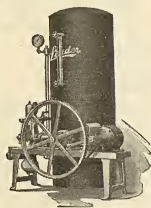
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NEW JERSEY Contracts Awarded

Office Building (alts.), Burlington, N. J., \$7,000. Architect, private plans. Owners, The Delaware and Atlantic Telegraph and Telephone Co., care of Bell Telephone Co., Seventeenth and Arch streets, Philadelphia. Brick, 2 stories, 95x20 feet, slag roof, hot water heat, electric light, cement and pine floors, ornamental iron work. Contract awarded to Albert Zellfelder, 151 South Broad street, Philadelphia.

Factory (add.), Broadway and Jefferson streets, Camden, N. J., \$60,000. Architect, private plans. Owners, Croft Howland Sons Co., on premises. Reinforced concrete and brick, 3 stories, 62x79 feet, composition and slate roof, pine and cement floors, rolled steel sash, hollow metal skylights, fire doors, elevators, roof ventilators (heating and lighting reserved). Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

House (fire repairs), Longport, N. J. Architect, H. A. Stout, Atlantic City, N. J. Owner, Ralph Harcourt, Longport, N. J. Wood, 2½ stories, 32x24 feet, slate roof, hot water heating, electric lighting, pine floors. Contract

awarded to H. C. Seull, Atlantic City, N. J.

Garage, South Broad street, Trenton, N. J. Architect, Wm. Kleeman, Trenton, N. J. Owner, Samuel Horowitz, South Broad street, Trenton, N. J. Brick, 1 story, 24x26 feet, slag roof, steam or hot water heat, electric lighting, concrete floors. Contract awarded to Andrew Geiger, Trenton, N. J.

Store Building (alts.), 1125-29 Broadway, Camden, N. J., \$3,500. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owner, Howard J. Dudley, on premises. Consists of general interior alterations, maple floors, metal lath, metal bulks. Contract awarded to Lewis T. West, 828 Broadway, Camden, N. J.

Factory, Rahway, N. J., \$200,000. Architect, private plans. Owners, National Pneumatic Co., 50 Church street, New York City. Brick, steel and concrete, 1 story and 2 stories, 200x363 feet, concrete roof, concrete floors (heating and lighting reserved), rolled steel sash, fire doors, ornamental iron work. Contract awarded to John N. Gill Co., Otis Building, Philadelphia.

fin, all of Dover, Del., are figuring.

Barn, Marshallton, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, M. Henderer, Maryland avenue and Bench. Frame, 2 stories, slag roof, pine floors. Architect has received bids.

Cow and Horse Stable, rear of Penn avenue and Rising Sun Lane. Architect, Leon W. Crawford, Odd Fellows' Building, Wilmington, Del. Owner, Wm. Winder Laird, Wilmington, Del. Brick and hollow tile, 2 stories, 52x28 feet, shingle roof, concrete floors, roof ventilators. Architect taking bids. H. A. Haddock, J. E. Healy & Son, A. S. Reed & Bro., all of Wilmington, Del., are figuring.

Stores and Apartments (alt. and add.), Eighth and Tatnall streets, Wilmington, Del. Architects, Brown & Whiteside, Dupont Building, Wilmington, Del. Owners, Turner & Steele, Wilmington, Del. Brick, 3 stories, 20x70 feet, slag roof (vapor heating, electric lighting and plumbing reserved), wood floors. Architects have received bids.

Stable and Sheds, Wilmington, Del. Architect, John A. Thompson, Ford Building, Wilmington, Del. Owners, Hamilton Coal Co., Tenth and Church streets, Wilmington, Del. Brick, 1 and 2 stories, composition roof, pine and concrete floors, alterations to two old buildings. Plans in progress.

Residences (16), Wilmington, Del. Architect, private plans. Owner, David L. Topkis, Wilmington, Del. Brick, 2 stories. Owner will build and will sub-let.

Store Building, Sixth and King streets, Wilmington, Del., \$25,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, McMahon Bros., on premises. Brick, slow burning, 4 stories, 60x35 feet, slag roof, pine floors, steam heating, electric lighting, hollow metal sash and skylights, metal bulks, fire escapes, iron stairs, hollow tile, metal lath, elevators. Lowest bidder, Joyce & Kerrigan, Wilmington, Del.

Store and Apartments (alt. and add.), 403-05 Delaware avenue, Wilmington, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, Stephen L. McKee, on premises. Brick, 3 stories, general interior alterations, pine floors, electric lighting, carpentry, plastering, flush bulks. Contract awarded to Charles Dougherty, Wilmington, Del.

Residence (add.), Marshallton, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, M. Henderer, Wilmington, Del. Frame, 2 stories (4-room addition), shingle roof, pine floors, electric lighting. Contract awarded to Gustav Lysander, 2209 Church street, Wilmington, Del.

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DELAWARE

Construction News

Residence (alts.), Castle Haven, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, C. F. Folsom, care of architect. Brick, 2½ stories, consists of water system, plumbing, electric lighting. Plans in progress.

Warehouse, Dover, Del. Architect, W. E.

Hance, 204 West Twenty-fourth street, Wilmington, Del. Owners, F. Romeo & Co., New York City. Concrete, 1 story and basement, 40x100 feet, composition roof, cement and hardwood floors, steam heating, electric lighting. Architect taking bids. Lon Clifton, Harvey Riggs, James H. Hiron, and George Coff-

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Miscellaneous Construction News

Factory, Harold and Hultz streets, Long Island, N. Y. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Karben & Bros., on premises. Reinforced concrete and steel, 6 stories and basement, 80x488 feet, slag roof, rolled steel sash, cement and concrete floors. Architects taking bids, due at New York office April 4th. American Concrete Steel Co., Newark, N. J.; Jacob A. Zimmerman, 18 East Forty-first street; Cramp & Co, 25 East Twenty-sixth street, and Levering & Garrigues, 552 West Twenty-third street, all of New York City, are figuring.

School, Keyser, W. Va. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owners, University of West Virginia (Keyser Branch), care of State Board of Control, E. B. Stephenson, Charleston, W. Va. Brick, terra cotta, stone and steel, 2 stories, 157x73 feet, slate and slag roof, steam heating, electric lighting, tile work, rolled steel skylights, cement and oak floors, metal lath, roof ventilators, metal ceilings, dampproofing, wire work, ornamental iron work. Owners taking bids, due April 10th. Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia, are figuring.

MARYLAND Construction News

Bottling House, Baltimore, Md. Architect, Louis Levi, Real Estate Trust Building, Philadelphia. Owners, Standard Brewing Co., Baltimore, Md. Brick and concrete, 1 story, 42x70 feet, slag roof, cement floors (heating and lighting reserved). Plans in progress. Architect will be ready for bids in ten days.

Garage, 6 Beachwood Road, Catonsville, Md. Architects, Mottu & White, 322 North Charles street, Baltimore. Owner, C. S. Timanus, on premises. Frame, composition roof, steam heating, electric lighting. Architects taking bids, due as soon as possible. Cowan Building Co., Madison street; W. E. Harr, 213 North Calvert street; Cowan Bros., 1804 N. Charles street; Chas. T. Leimbach, 19 Fusting avenue, and John H. Gerwig, Catonsville, Md., are figuring.

Residence and Garage, Liberty Heights avenue, Baltimore, Md. Architects, Smith & May, Calvert Building, Baltimore, Md. Owner, Park School, on premises. Frame and stucco, 1 and 2 stories, asbestos shingle roof, steam heating, electric lighting, skylights, plastering, painting, tile work, plumbing. Architects taking bids. W. E. Burnham, Law Building;

J. Henry Smith, 1426 Light street; G. W. Tovell, 401 McCulloh street; C. L. Stockhausen Co., Gay and Water streets; Frairie Bros. & Haigley, 18 Clay street, all of Baltimore, Md., are figuring.

Warehouse and Canning Factory, Wolfe and Preston streets, Baltimore, Md. Architect, J. F. Nelker, Professional Building, Baltimore. Owners, Roberts Bros., on premises. Brick, concrete and steel, 1 story, 65x86 feet, 45x86 feet and 20x20 feet, slag roof, plumbing, 125 H. P. boiler. Plans about completed. Architect will take bids in a few days.

Mill Buildings, Oella, Md., \$260,000. Architect, Charles J. Main, 201 Devonshire street, Boston, Mass. Owners, Oella Mills, Oella, Md. Main mill, brick and steel, slow burning, 4 stories, 156x92 feet; dye house and storage building, 47x29 feet, brick and steel, slow burning; finishing mill, 5 stories, concrete, stone, brick and steel, composition and slag roofs, hollow metal sash and skylights, hollow tile, mill work, cement floors, electric lighting. Architect taking bids. B. P. Bennett Building Co., and the Consolidated Eng. Co., both of Baltimore, Md., are figuring.

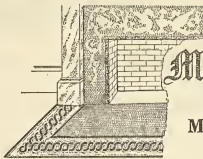
MARYLAND Contracts Awarded

Foundry (add.), Charles and Wells streets, Baltimore, Md., \$15,000. Architect, private plans. Owners, Kennedy Foundry Co., on premises. Brick, steel and concrete, 1 story, composition roof, electric lighting, hollow metal skylights, roof ventilating. Contract awarded to Frairie Bros. & Haigley, 18 Clay street, Baltimore.

Residences (5), 2221-9 West Pratt street,

Baltimore, Md. Architect, private plans. Owner, Thomas E. Biddison, 3312 Elgin avenue, Baltimore, Md. Brick, 2 stories, 13x41 feet, slag roof, hot air heating, gas lighting. Owner will take sub-bids on all lines.

Residences (4), 2800-3 Chelsea Terrace, Baltimore, Md., \$14,000. Architect, George R. Morris, Title Building, Baltimore. Owners, Northwest Real Estate Co., 531 Title Building,



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Baltimore, Md. Frame, 2½ stories, 25x44 feet, slate and tin roof, hot water heating, electric lighting, hollow metal work, plumbing, tile work, hardwood floors, refrigerators. Architect will build and sublet all contracts.

Residence, Round Bay, Md. Architect, private plans. Owner, Geo. H. Koether, 406 Park avenue, Baltimore, Md. Brick foundations, frame, 2½ stories, slate roof, hot air heating, electric lighting, tile work, plastering, plumbing, painting. Contract awarded to Cogswell-Koether Co., 406 Park avenue, Baltimore, Md.

Garage, 106-08 Dover street, Baltimore, Md. Architect, private plans. Owner, J. Henry Miller, Franklin and Eutaw streets, Baltimore, Md. Brick, 1 story, slag roof, electric lighting, skylights, ventilators, reinforced concrete work, interior slate work. Owner will build and will sub-let all work.

Office and Warehouse, Oak street, near Twenty-third street, Baltimore, Md. Architect, private plans. Owners, W. E. Harr, Inc., & Wm. Gartho, 213 North Calvert street, Baltimore. Brick, 2 stories, slag roof, hot water heating, electric lighting, skylights, ventilators, plumbing. Contract awarded to W. E. Harr, Inc., 213 North Calvert street, Baltimore.

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Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwellings (4), McKean and Abbottsford avenue, \$16,800. J. H. McClatchy (O and C), 848 Land Title Building. Brick and stone, 2 stories, 16x34 feet, slag roof, hot water heating.

Storage Building, Eighteenth and Courtland streets, \$9,000. Freitberger Aron Co. (O), on premises. Wm. Steel & Sons Co. (C), 34 S. Fifteenth street. Brick, 1 story, 40x63 feet, cement floor, slag roofs.

Inspector's Office, American and Luzerne streets, \$3,000. P. & Reading R. R. Co. (O), Twelfth and Market streets. F. A. Havens Co. (C), 815 N. Nineteenth street. Brick, 1 story, 17x30 feet, ready roofing.

Garage and Dwellings, 3330-3332 N. Broad street, \$4,000. W. C. Carman (O and C), 1220 W. Allegheny avenue. Brick, 2 stories, 25x23 feet, slag roof, steam heating, stone foundations.

Garage, Carlisle and Ontario streets, \$15,000. W. C. Carman (O and C), 1220 W. Allegheny avenue. Brick, 49x155 feet, 2 stories, slag roof, steam heating.

Shop and Office, 2809 N. Mascher street, \$2,500. Joshua L. Wilkey (O), 103 E. Lehigh avenue. John J. Freil (C), 6108 N. Front st. Brick, 2 stories, 18x50 feet, slag roof, hot water heating, stone foundation.

Garage, 2311 N. Broad street, \$1,000. M. S. W. Hirsch (O), on premises. Dan McNauee (C), 1621 N. Fifteenth street. Brick, 1 story, 21x32 feet, slag roof, cement floor.

Warehouse and Office, Swanson and Beck st., \$6,800. Phila. Grease Mfg. Co. (O), 848-50 S. Swanson street. Frank I. Wintz (C), 1618 N. Twenty-seventh street. Brick, 2 stories, 20x100 feet, stone foundation, slag roof.

Garage, Park and Diamond streets, \$1,200. David Bradley (O), on premises. Henry C. Dahl (C), 231 South Eighth street. Brick, 1 story, 19x20 feet, tile roof, cement floor.

Oil Storage Building, Seventeenth and Buttonwood streets, \$700. Wm. Sellers Co., Inc. (O), 1600 Hamilton street. Brick, 1 story, 9x13 feet.

Garage, Forty-eighth and Chestnut streets, \$40,000. J. W. Peoples (O), 215 S. Farragut street. A. Hartman (C), 910 Liberty Building. Brick, 1 story, 100x215 feet, slag roof.

Garage, 5916 Torresdale avenue, \$2,500. J. Philip Keep (O), on premises. Lewis Deffrich (C), 3016 Comly street. Brick, 18x100 feet, with wing 16x40 feet, slag roof.

Offices, Beach street, north of Palmer street, \$10,000. Wm. Cramp & Sons Ship & Eng. Building Co. (O), Philadelphia. Hoffman

Eng. Cont. Co. (C), Penna. Building, Philadelphia. Brick, 2 stories, 36x71 feet.

Garage, Clifford and Thirty-first street, \$800. Wm. F. Koelle Co (O & C), Twenty-sixth and Oxford streets. Brick, 1 story, 70x18 feet, slag roof.

Stores and Dwellings (3), 5532-44-36 Baltimore avenue, \$9,000. Louis Davidson (O and C), 808 Snyder avenue. Stone and brick, 1 story, 17x50 feet, slag roof, steam heating, stone foundations.

Shop, 258 N. Twenty-second street, \$2,100. Ed. M. Harris (O and C), 2214 Chestnut st. Brick, 1 story, 22x65 feet, slag roof.

Boat House, Delaware and Linden avenues, \$750. William J. Neill (O), 2442 Memphis street. Frame, 1½ stories, 14x24 feet.

Garage, Chew street and Washington lane, \$2,700. Cliveden Garage Co. (O), on premises. Chas. H. Eckman (C), 2126 North Sixteenth street. Brick, 1 story, 26x24 feet, and 52x21 feet, slag roof, stone foundation.

Storage, Ontario and "C" streets, \$3,700. Phila. Storage & Battery Co. (O), on premises. F. & E. Aubel (C), 2503 Germantown avenue. Iron on iron, 1 story, 49x100 feet.

Garage, 2012 S. Broad street, \$3,200. E. G. Kobb (O), Fifteenth and Snyder avenue. Wm. J. Uhler (C), 1841 S. Broad street. Brick, 1 story, 90x34 feet, hollow tile partitions, slag roof.

Garage, 155 N. Twenty-third street, \$1,800. Michael Doimelly (O), 157 North Twenty-third street. E. E. Hollenback Inc. (C), 1804 Brandywine street. Brick, 1 story, 20x80 feet, slag roof, stone foundation.

Garage, 1510-12 Widner Place, \$300. Ida Corman (O), 417 Lafayette Building. P. J. Rolan (C), 2322 E. Cambria street. Brick, 1 story, 12x20 feet, stone foundation.

Factory, 921 to 27 Brown street, \$3,300. Powers-Weightman-Rosengarten Co. (O), Ninth and Brown streets. R. C. Ballinger (C), 218 North Thirteenth street. Brick, 1 story, 45x60 feet.

Garage, Collins and Westmoreland streets, \$7,800. Ambrose Letters (O), Trenton and Westmoreland streets. Barnes Bros (C), 2080 E. Willard street. Brick and stone, 55x18 feet, 1 story, 19x18 feet, 2 stories, 74x52 feet, 1 story, slag roof, stone foundation.

Dwellings (4), 6120-22-24-26 W. Columbia avenue, \$22,000. John H. McClatchy (O and C), 848 Land Title Building. Stone and brick, 3 stories, 16x34 feet, slag and slate roofs, hot water heating, stone foundation.

Garage, 2312 North Howard street, \$450. Ed. Agnew (O), 2312 N. Howard street. Jos. Keis (O), 1331 N. Front street. Alterations, cement floors.

Office, Garage, Power House, Thirtieth and Race streets, \$11,300. Atlantic Refining Co. (O), 3144 Passynuck avenue. Metzger & Fisher (C), Otis Building. Interior alterations, terra cotta partitions, new brick walls, alterations, size 103x30 feet, and brick, 1 story, 10x14 feet, reinforced concrete roof.

Store and Dwellings, 14-16 South Fifty-second street, \$3,000. Manuel Steppacher (O), 424 S. Penn street. Wm. H. Meyer (Arch), 1861 Carter street, New York City. New store front and alterations.

Store and Dwelling, 730 S. Fourth street, \$500. Mimmie Rudberg (O), 708 S. Fourth street. Joseph Shechtman (C), 1734 North Seventh street. Alteration to bulk window.

Automobile Supplies, 5114-16 Walnut street, \$500. Garage Service Co. (O), on premises. W. H. Morris (C), 5234 Brownall avenue. Flush bulk window and rustic house, 12x12 feet, slag roof.

School Rooms, 1706-08 South street, \$800. Jos. Stern (O), Twenty-second and Catherine streets. Brownworth & Co. (C), 1611 Sansom street. Fire escape.

Dwelling, 908 South Eighth street, \$1,000. Marks Kohn (O and C), on premises. Brick, rear 3 story addition, 12x16 feet.

Store and Dwelling, Old York road and Green lane, \$900. John A. Lottes (O), 6039 Old York road. A. E. Voigt (C), 6108 N. Tenth street. Brick, 1 story, 16x20 feet, slag roof, metal ceiling.

Store and Dwelling, 1703 South Ninth st., \$1,000. Angelo Mazza (O), 940 South Sixth st. A. De Mares (C), 1234 Christian street. Brick, 2 stories, 12x11 feet, interior alteration.

Dwelling, 1708 Wallace street, \$3,500. Miss Jane Cook (O), 1711 Wallace street. S. L. Lauff (C), 700 North Nineteenth street. Brick, 3 stories, 15x10 feet, interior alterations.

Garage, Ann and Amber streets, \$1,500. G. Kieney (O and C), 2969 amber street. Brick, 1 story, 30x50 feet, slag roof, stone foundation.

Wagon Shop, 1345 Cumberland street, \$300. W. Maeker (O), on premises. A. A. Ardis, Jr. (C), 219 South Fifth street. Repair wall.

Work Shop, 3931 North Fifth street, \$750. M. Moister (O and C), on premises. Brick wall, 12x10 feet, and 1 story rear brick addition, 16x30 feet.

Shop and Garage, 5524 Pulaski avenue, \$2,000. M. S. Oberholzer (O and C), on premises. Brick, 1 story, 0x00 feet, slag roof, stone foundation, iron and wire partition.

Boiler House, Percy and Willow streets, \$950. Swift & Co. (O), Ninth and Noble streets. Window Boiler Co. (C), 803 Harrison Building. Repairing north wall.

Shop, 427 Wood street, \$1,000. Joseph Bush (O), on premises. M. Yellin (C), 712 N. Franklin street. Brick, 1 story, 13x30 feet, slag roof.

Dwellings (3), 302-4-6 Poplar street, \$1,400. T. E. Kremer (O), 411 W. Girard avenue. E. J. Walters (C), 1525 Stiles street. Brick, 2 stories, 8x12 feet, rear addition.

Garage, 1807 S. Carlisle street, \$950. Dr. O. O. Montecelli (O), 1214 South Broad street. A. DeMarco (C), 1224 Christian street. Brick, 1 story, 17x28 feet, slag roof.

Garage, Forty-ninth and Botanic avenue, \$12,000. Geo. W. Smith & Co. (O), Thirty-ninth and Botanic avenue. John N. Gill Co. (C), Otis Building. Brick, 1 story, 72x74 feet, steel trussed roof.

Offices, Eighth and Chestnut streets, \$4,000. Herman Rump (O), Fifth and Cherry streets.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, Twenty-first and Carpenter streets, \$400. Carmela Lo Casale (O), on premises. Alfonso Franco (C), 506 North

Sixty-fourth street. Brick, 1 story rear addition, 16x13 feet, slag roof and stone foundation.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

A. R. Raff Co. (C), 1633-35 Thompson street. Repair fire damage.

Tank Support, Front and Dauphin streets, \$700. John Bromley & Son (O), Lehigh avenue and "A." street. Geo. W. Stewart (C), 2123 Germantown avenue. Brick walls for tank support.

Open Sheds (3), Schuylkill and Catherine street, \$3,000. Raymond Concrete Pipe Co. (O and C), 2006 Finance Building. Posts and fireproof roof, 1 shed, 30x150 feet, 10 feet high; 1 shed, 20x48 feet, 27 feet high; 1 shed, 20x50 feet, 10 feet high.

Garage, 804 N. Broad street, \$1,000. Levick & Waldow (O), 1829 South Seventh street. P. Savar (C), 712 Snyder avenue. Steam heat apparatus.

Sheds, 608 Richmond street, \$900. Stroud & Wilgas (O), 522 Richmond street. S. S. Sanders & Bro. (C), 519 Richmond street. Shed, 18x100 feet, 20 foot high, slag roof.

Office and Garage, Ontario and Braban sts., \$19,000. The Fretz Co. (O), on premises. H. Brockelhurst (C), 512 W. Norris street. Brick, 1 story, 42x63 feet, slag roof.

Boiler House and Engine House, 1 story, 64 x37 feet and 2 stories, 20x37 feet, slag roof.

Shed, Frankford Creek and Bridge street, \$500. Geo. A. Sinn (O), on premises. Storage shed, 25x32 feet and 12 feet high, slag roof.

Dwelling, 2427 N. Fifth street, \$350. John Blickey (O), on premises. Wm. Freiling (C), 2553 N. Fifth street. Alteration to bay window.

Dwelling, 1416 S. Beulah street, \$650. Jos. Frijio (O), on premises. Luigi Meli (C), 8413 Ashwood avenue. Brick, 2 stories, 11x11 feet, slag roof, stone foundation.

Store and Dwelling, 5031 Market street, \$600. David Welshifsky (O and C), on premises. Brick, 2 stories, 13x16 feet, slag roof.

Oce, Twenty-sixth and Oxford street, \$300. Wm. F. Krelle Co. (O and C), on premises. New Partition and plastering.

Store and Dwelling, 4115 Lancaster avenue, \$500. J. L. Schneider (O), 329 W. Union st. C. Stuhlman (C), 871 Belmont avenue. Brick, 1 story, 15x16 feet.

Dwelling, 4344 Frankford avenue, \$700. Dr. Wm. J. Gernsey (O), on premises. Geo. Rimer (C), 4842 Hawthorne street. Brick, 1 story, 9x12 feet, slag roof.

Dwelling, 2422 E. Fifth street, \$350. Joe Kuhar (O), on premises. Frank Gardner (C), 1434 N. Philip street. Brick, 1 story, 10x13 feet, slag roof.

Garage, 1123-25 Melon street, \$1,800. Mrs. L. Reiter (O), 2762 N. Twenty-eighth street. M. H. Brown (C), 2718 N. Twenty-eighth st. Alterations, cement floor.

Saloon and Dwelling, Second and Fairmount avenue, \$1,125. Harry Grossman (O), 550 N. Second street. Louis Cohn (C), 417 Christian street. Alterations.

Store and Dwelling, Twenty-second and South street, \$3,000. L. Cohen (O), 1102 South streets. A. P. Lueka (C), 1727 North Fifty-first street. Interior alterations, erect partitions, bathroom.

Garage, Columbia and Hancock streets, \$6,000. H. S. Donaldson (O), on premises. Doyle & Co. (C), 1519-21 Sanson street. Repair to roof and brick up opening in wall.

Open Shed, Forty-second and Sanson sts., \$800. Phila. R. T. Co. (O), Eighth and Dauphin streets. L. C. Smith (C), Forty-first and Chester avenue. Frame, 1 story, or 8 feet high, and, 10x150 feet.

Store and Dwelling, 917 S. Twenty-second street, \$5755. Samuel Cathers (O), 1712 S. Twenty-third street. American Stone Co. (C), Fourth and Noble streets. Alterations and repairs.

Boiler Room, Lebanon avenue and Sixty-

fourth street, \$1,500. Est of Burs Jones (O), 1100 N. Sixty-second street. Lewis Jones, Jr. (C), 1100 N. Sixty-fourth street. Brick, 1 story, 40x19 feet, slag roof.

Shop, 1722 N. Hancock street, \$900. Kelly Hughes Co. (O), on premises. James Kelly & 715 Bulletin Building. Brick, 2 stories, 18x50 feet walls are to be erected.

Storage, 113 Bainbridge street, \$1,500. M. M. Closkey (O), 111 Bainbridge street. Edw. S. McDevitt (C), 1628 S. Twenty-second st. Alterations.

Garage, 838-40 Carpenter street, \$10,000. Michael De Negio (O), 947 S. Ninth street. Corasoli & Seurci (C), 1218 Catherine street. Brick, 2 stories, 29x48 feet, and 26x34 feet and interior alterations.

Store and Dwelling, 2836 Ridge avenue, \$400. J. Feldman (O), 209 Lincoln Building. J. Krantz (C), Newark, Del. Co. Pa. Repairs.

Store and Dwelling, Sixtieth and De Laney streets, \$4,000. John F. Graham (O), 5440 Lansdowne avenue. Raith Const. Co. (C),

302 N. Master street. Interior alterations and 1 story, 15x14 feet, brick addition.

Oil House, Third and Dock streets, \$2,000. Girard Trust Co. (O), Philadelphia, Pa. B. H. Davis & Co. (C), Glenside. Steam heating system.

Rag Warehouse, 729 S. Marshall street, \$650. Jos. Esposito (O), 603 Fitzwater street. Frank R. Bilotta (C), Seventh and Christian streets. Alterations.

Store and Dwelling, 50 S. Sixtieth street, \$6,200. M. Drucker (O), on premises. J. Gorchov (C), 4116 Girard avenue. Brick, 2 stories, 12x14 feet, back, 12x30 feet; brick, 3 stories, 15x34 feet, slag roof, hot water heating.

Store, Thirteenth and Market streets, \$1,800. Colonial Trust Co. (O), Thirteenth and Market streets. Blot & Baust (C), 421 E. Fifty-eighth street, New York City. Interior alterations.

Dwelling, 2407 N. Fifty-second street, \$500. Wm. P. Rexford (O and C), on premises. Alterations.

ARE YOU GOING OR COMING?

A Few Pointed Questions to American Business Men

By W. M. HART—Photoplay.

What is your business going to be after the war—an institution or a memory? Are you grooming yourself for second place—for oblivion—or for leadership? You may have anything you want—but you must decide now.

Did you think that you could **embalm** your business for the period of the war and then resuscitate it at will? It can't be done.

You cannot eat your cake and have it, too. You cannot hide your head in the sand until the storm is over and then make the public believe that you are one of the country's big, bold captains of industry.

This country isn't going out of business!

J. Pierpont Morgan the elder made his money "by always being a bull on the United States!" No matter what else went up or down he always played the United States for a rise. Don't you think he would play the game the same way to-day—and don't you think he would win bigger than ever?

Have you a better system to suggest? Are you playing it? And is it working? And does your pessimism make you happy? Or are you a little more nervous, a little less confident each day? And has your state of mind anything to do with your fitness to hold a big business together and to maintain or increase its momentum?

The country's going ahead just the same—with or without you—but don't you wish, just for your own sake, that you had a little more of that Morgan faith and optimism and the courage they breed?

This war period is the acid test! It's going to spotlight the big men in American business—the creators, the men of imagination, foresight and staying-power—the men who were "always bulls on the United States." You

cannot wait until after the war to join this select coterie of the men who carried on. You will have to do it now. There is no cure for arrested development.

If your business is built on **publicity**—on the public's knowledge of you and its good-will toward you—are you going to keep that knowledge alive and that good-will active—or not?

Suppose you can't fill your orders now—suppose your facilities are all taken up with war work—or you can't get enough cars to ship in—or any public isn't buying your goods just now—or any one of a thousand things—are you going to invite the public to forget you?

Suppose the war lasts five years and you can't make a dollar during that period, and your normal profits are a million dollars a year, is it worth anything to you to keep your good-will active and growing—and to position yourself for a profit of one or two millions a year after the war?

How much is your good-will worth—isn't it easily worth ten times your annual earning capacity? Do you want to forfeit an asset like that just because you can't cash in on it for a year or two, or maybe five? How long has it taken you to build it—and how much has it cost you? Do you want to buy it all over again? Do you think you can buy it any more quickly or cheaply the next time?

How long do you think your good-will is good for, anyway, if left to itself—even in normal times? And how long do you think it will be good for in these times, when the public has more to think about besides you than it ever had before? The public has a short memory. Are you willing to risk its

forgetfulness—even to invite it? Figure it out in dollars and cents. Can you afford it?

Retrench? Of course! But retrenchment does not mean retreat. To conserve does not mean to quit.

Retrenchment means "stripping for action"—that's all; cutting out the impediments and getting down to real business. American business must now be "stripped for action"—but stripping does not mean starving. You have to strip an athlete, but you cannot starve him and make him win. You merely stop feeding him cocktails and candy and give him milk and meat instead! No more can you starve your business and make it win. But you can cut out the frills and give it nourishment! You believe in that, don't you?

And conservation means the development of resources instead of their waste—that's all. When the Government started in to conserve the forests it didn't neglect them. It hired good men and spent good money to develop them. That's what conservation means—development through proper care and nourishment. You don't believe in deterioration, do you? Then you do believe in conservation.

Words like retrenchment and conservation scare some men out of their senses. But the truth is that retrenchment and conservation are the two best things that ever happened to us. It will be worth the huge financial cost of the war to get them permanently into the fabric of American business. Before we're ten years older we'll all thank God that something happened to put these two words into our vocabulary—or we'll be out of business—listed among the casualties of war.

We don't believe that American business men are quitters—that in the face of present conditions they intend to create a new tradition of retreat. We must learn a new technique of business, a better one, one that's going to give us more and better business. But no real business man ever hesitated before new and difficult problems. These are the things that weed out the unfit and make business better, healthier, sounder for everybody that's left.

That's what is happening right now. A good many businesses are losing ground that it would be easier to hold than it ever will be to regain. Good-will does not stand still—it goes forward or back.

The United States is not going to quit—why should you?

The calmest judges of affairs in the country prophesy a post-war period of prosperity for America such as the world has never seen! And every man who thinks knows that it is true. The figures of after-the-war trade are going to stagger even the optimists. A world is to be rebuilt, re-clothed, re-furnished and re-stocked—entertained, amused and educated all over again. The institutions that build their places in the public good-will now are going to do the job—at enormous profit and satisfaction to everybody concerned.

The world's present facilities are totally inadequate to the new job. The only sane course for American business men, therefore, is to build now for the future. The real leaders in every industry must do it—and will do it—because it is the price of leadership.

Businesses that are firmly entrenched in the public mind and the public good-will when the war ends are going to make fortunes while the others are getting started! Yours will not be one of them unless you lay the foundation now.

ANNUAL ARCHITECTURAL EXHIBITION AT ART ALLIANCE

The twenty-fourth annual architectural exhibition of the Philadelphia Chapter of the American Institute of Architects and the T-Square Club opened Saturday evening, March 23rd, at 8.30 o'clock, with a private view in the galleries of the Art Alliance. The exhibition represented most of the interesting work in architecture executed in this section of the country in the last year, as was shown by the photographs and architects' drawings which filled the three exhibition rooms.

The work not only represented Philadelphia talent, but out-of-town architects contributed to make an exhibition of unusual merit. The dominating exhibit was the work of Day & Klauder, whose examples of work for Cornell, Yale and Princeton Universities and Wellesley College gave convincing proof that these architects are past masters in designing a type of work that has been accepted as the most satisfactory from all angles, viewed as the best for collegiate buildings.

Another featured exhibit was the work of Benjamin W. Morris, fresh from the New York Architectural League's exhibition, where it was awarded the league's medal for the best work of the year.

B. G. Goodhue showed an interesting perspective drawing of Tyrone city. The same architect contributed a fine perspective of St. Thomas' Church.

Wilson, Eyre & McIlvain's work was also prominent with photographs of a well-designed suburban residence, including the garden layout and other picturesque bits of architecture.

Lewis Colt Albro showed photographs of a stunning suburban house erected at Cold Springs. Myron Hunt was another out-of-town architect whose work was of real interest.

Another interesting piece of work was the photograph of the memorial niche in the Lea Public School, which showed a bust of Arthur H. Lea. The work was executed by Charles Grafley, sculptor, and John F. Harbeson, architect. Other exhibits were furnished by Mellor & Meigs, Martin & Kirkpatrick, Edmund G. Gilchrist, De Armond, Ashmead & Bickley, Robert R. McGoodwin and many other local architects.

The exhibition of the crafts was made extremely interesting through the work of the Enfield Pottery and Tile Works, whose garden

pottery and tile work showed a high degree of skill, both in the designs and execution of their work. The ornamental iron work by Samuel Yellin showed a skill almost too marvelous to comprehend—how this medium can be worked into the shapes and ornaments made by this master craftsman.

Nicola D'Ascenzo, with his artistic display of stained glass, helped to make the craftsman's feature of the exhibition of more than usual interest.

The exhibition is without doubt a fine display of architectural work and should be of unusual interest to every one interested in architecture and art.

The exhibition will continue, and is open to the public, until April 6th.

USE OF BUILDING MATERIALS IN HONDURAS.

Honduras offers a poor market for roofing papers, paints and waterproofing compounds and, in fact, for imported building materials of all descriptions, writes Consul Francis J. Dyer, Tegucigalpa. The better class of construction here is of stone or adobe blocks made from mud and sun dried. The roofs are usually of red earthenware tiles, and the floors are of flat tiles, either red earthenware, cement, or a concrete composition, with a glazed surface, with designs either in low relief or smooth, and in different colors. Sometimes the flooring is of wood or even of beaten earth.

Windows ordinarily are neither glazed nor screened, and are protected by heavy wooden shutters. The doors and blinds and other fittings, usually designated as "millwork," are usually hand made, although there is a small mill in Tegucigalpa which turns out such work. Outside of the towns and cities construction is, in the main, far more primitive, the climate permitting of such light construction as a framework of palings set upright in the ground, with a roof, sometimes of tiles, but more frequently of palm leaves. The house walls may or may not be interlaced with palm leaves.

Oil and water paints are used to some extent, but whitewash made from lime burned in simple kilns of local design is more generally used for both interior and exterior work.—"National Builder."

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Reserve for Taxes	-	950,000.00
Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
Losses Paid Since Organization	-	192,518,273.33

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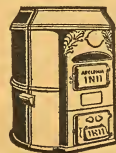
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April 3, 1918

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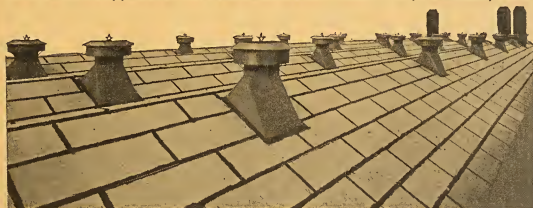
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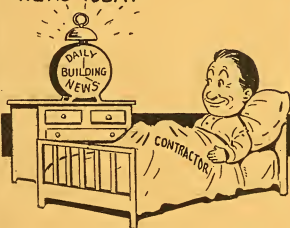


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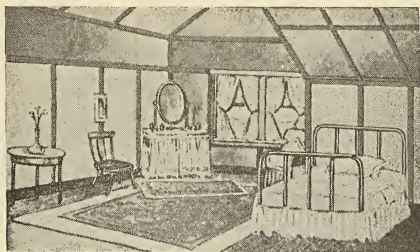
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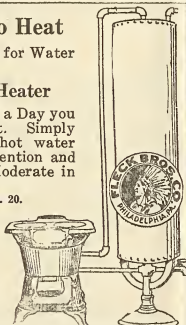
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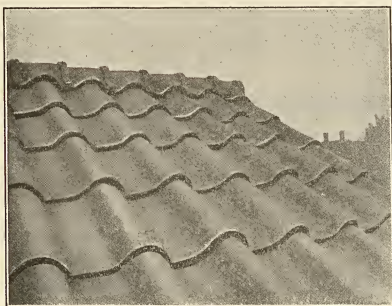
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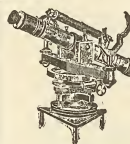
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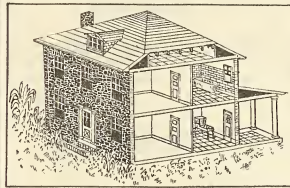


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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural

VOLUME XXXIII

Engineering and the Building Trades

PHILADELPHIA

Number 14

April 3, 1918

BUILDERS' GUIDE

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and Builders' Guide

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As The Editor Sees It



TO be or not to be, is the question of the hour as regards building, and viewed from all angles it is a very complex question.

Many prospective builders are deferring until after the war, in the hope that materials and labor cost will decrease at that time. Yet it is the opinion of some well-informed people that materials and labor will not appreciably decrease in cost after the war. Pertinent to the labor question is the declaration by George F. Thesmacher, President of the Building Trades Employers' Association of Cleveland that contractors in that city will pay no increase over the 1917 wage scales.

Building contractors in Cleveland consider financing the greatest obstacle to new dwelling construction, and they hope that the proposed war finance corporation may improve the situation by permitting banking institutions to borrow on real estate mortgages.

The appointment of a committee, composed of contractors, material men, architects, bankers, loan association men and representatives of other interests, is urged, to determine the essential or non-essential character of projects before banks be requested to finance them; after a project has been pronounced essential, the committee is to insist that assurance be given that the project once under way will be completed. Such an assurance necessarily implies close co-operation and agreement of the labor unions.

Very serious and undesirable results may follow a great falling off in necessary building. A good example of the complications which may arise from such an event is shown in the case of England.

In that country all private building which involved a sum of more than \$2,500 was prohibited soon after the beginning of the war—with the exception, of course, of munition plants, working-men's houses and like operations.

The result is, that the shortage of houses (mainly for the working classes) in England and Wales amounts to about three hundred thousand, and to make up for this deficiency the Government will have to finance the building of this number of dwellings as soon as the war is ended. This, of course, adds to the burden of the war debt.

A certain amount of building, however, must of necessity, be deferred until after the war. How can we best be prepared to meet the demands for building which peace will thrust upon us?

This question is admirably answered by the National Planning Bureau, Wilkes-Barre, Pa., under the management of Edmund H. Poggi architect, whose message to the "Building Brains of America is *Plan Buildings Now!*

Planning and designing of buildings are as necessary to the demand for material as our hands and feet are to a healthy appetite.

With an abundance of building material, labor, railroad facilities, good weather, a country booming with pros-

perity—a tremendous national and foreign demand, what are we going to do without plans?

We shall be like a great army of hungry men, in the presence of food—plenty, bound hand and foot, and calling for help to a little group who shall be overwhelmed in their efforts to serve.

Let us advertise . . . and in this manner place the matter before the building public.

Advertise now. Not as you had contemplated—but more and then *more*. Tell the public why planning *now* is wisdom from your standpoint—as applied to *your* business and *your* product. There are at least a thousand reasons and you know them all."

It should be the intimate and immediate concern of everybody in the building trades to get behind these men who believe that "What *should* be done, Can be done." Their work will be wasted unless they have the co-operation of all for whom they are working.

It is *your* business to help make this Planning Campaign the biggest combined advertising program the building business has ever seen. Planning now will mean million of dollars to the building trades and to you.

It should not be difficult for us to see the wisdom of this Planning Campaign. We have all seen the havoc wrought by unpreparedness—waste of time, waste of money, waste of lives is the toll which lack of foresight have brought to this country and the others in this war.

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America, self-satisfied and entirely content, does not rouse herself until the needs of the hour can no longer be put off—then comes haste and with it waste.

Now that war conditions are here, everyone admits that these conditions are abnormal. But—are we admitting to ourselves that after war conditions will also be abnormal, but in a vastly different way from those of the present? Are we facing this inevitable future? Are we planning how best to meet it?

* * *

A PROPOS of the question of preparing to meet the demands which peace will make upon building interests is the following suggestion to architects:

"Who Is the Dreamer—the Architect or the Client?" in *Building Review*:

Before the next onset of building, before the coming of the period again when the building industry will be humming as of yore, it might be well for architects to reflect on some of the things that in the past have led to criticism of the profession and practice in general.

Not the least among the ideas entertained by the great public, whose lack of information regarding the function of architects is due largely to the failure of the architectural organizations in America to educate the people to a better understanding, is that the architect "is a dreamer," and "unpractical."

This notion is not entertained so much among bankers and heads of large organizations that in the recent past have been involved in large building undertakings, and whose contact with their architects has given them a better insight. But the notion is nevertheless held by a great percentage.

Much can be done by architects to accelerate a reaction that will correct the fallacy.

The impractical dreamers are not the architects, but the clients themselves, as a rule. The architect labors constantly to keep within reasonable bounds the unpractical ideas of a prospective builder. This does not refer to cost; the owner's extravagant notions of cost can be offset by a systematic presentation of plain figures—a convincing array of figures and cost data is evidence that a client can appreciate, for everybody has some conception of money value.

The trouble, however, that is not so easily set right by the architect, except by elaborate explanations that don't explain, is the ignorance of the client as building from the drawings, through the whole gamut, to completion. The client imposes unreasonable and unpractical conditions, some of which, to an experienced architect, are wild imaginings that have not even the saving grace of sug-

gesting something that might prove workable.

The client is often the dreamer; the architect, even if he is the seasoned kind, has enthusiasm, imagination, inspiration, but is always the most practical of men. And not least of his usefulness is to hold the client down; and in spite of protests to produce for said client a building that will not be either inefficient or ridiculous, or both. Which means, in the long run, saving the client's investment for him, whether it be a home or a commercial structure.

Consider the daily routine of an average architect! How varied, detailed and essentially practical! Any profession whose chief concern is deadly accuracy,

and essential permanency, as is the case with the profession of architecture, cannot indulge in unprofitable or reckless dreams. The daily problems that confront the architect are such as serve only to reinforce his already highly developed vein of practicality. If he dreams it is of things unconnected with his profession.

That the unpractical theorists and dreamers are not the architects, but is the client, is a fact that should be impressed upon the public by a course of education that will cite specific examples of just how often the architect saves Mr. Public from making a fool of himself. There are exceptions—but these serve only to emphasize the general rule.

EDITORIAL NOTES

Among the architects of Philadelphia who have dedicated their lives to the service of our country during the war are:

Arnal, Leon Eugene, Officer Interpreter.

Antrim, Walter, Ensign, U. S. Navy.

Atkinson, Howard Stanley.

Barney, W. Pope, Sergeant, 446th Engineers.

Borie, C. Louis, 3rd, 2nd Lieutenant, C. A. R. C.

Bullock, John Emlen.

Campbell, Wm. M., 2nd Lieutenant, 77th Field Artillery.

Clark, Wm. A., Aviation Corps.

Cornelius, John C., 1st Lieutenant, Coast Artillery.

Crothers, E. Kenney.

Cret, Paul P., Interpreter Stagiaire, A. E. F., F. P. O.

Delk, Edward Buehler, Signal R. C. Aviation Section, A. E. F., 1st Lieutenant.

Dechant, Miles B., 2nd Lieutenant, A. E. F.

Dillon, Theodore F., Aviation Section, Naval Reserve.

Dodge, Albert, Major, Infantry, Camp Meade.

Edwards, E. Nelson.

Gravel, Wm. Henry, Captain, U. S. Engineers, A. E. F.

Hamilton, Hugh A., Captain, U. S. Engineers, A. E. F.

Hastings, Frederick W., Ensign, Naval Reserve.

Heim, Harvey Wm.

Howe, George, Ambulance Corps, France.

Hunt, David Merton, 1st Lieutenant, 312th Field Artillery.

Kirkpatrick, Donald M., 1st Lieutenant, Infantry, A. E. F.

Koelle, Wm. F. B., Sergeant, Enlisted Reserve Corps, Aviation Land Division.

Laschenski, Sigmund J., 2nd Lieutenant, Infantry.

Lewis, George M. D., Aviation Corps, A. E. F.

Lister, Brooks, 1st Lieutenant, Infantry.

Love, Arthur S., 2nd Lieutenant, 68th Aero Construction Squadron.

McBroom, Leland, 2nd Lieutenant, 311th Field Artillery.

Meigs, Arthur I., Captain, Field Artillery.

Muhlenberg, Frederick A., Captain, Infantry.

Neely, Richard, Sergeant, 446th Engineers.

Rankin, Wm., Quartermasters Corps.

Register, H. Bartol, 1st Lieutenant, Signal Corps, A. E. F.

Robinson, Reah De Bourg, Camouflage Company, 24th Engineers, A. E. F.

Rush, Louis H., 2nd Lieutenant, Quartermasters Corps.

Shawde, John C., Corporal, 446th Depot Detachment, Engineers.

Shore, Howard E., Captain, U. S. Engineers.

Sims, Joseph P., 1st Lieutenant, Ordnance Department.

Suchert, Lancelot W., 2nd Lieutenant, Signal R. C. Aviation Section.

Tilden, Marmaduke, Jr., 1st Lieutenant, Signal Corps, A. E. F.

Van Voorhees, Edwin M., Major, Infantry.

Wigham, Edward H., 1st Lieutenant, Coast Artillery, A. E. F.

Zantzig, Clarence C., American Legation, Stockholm, Sweden.

* * *

The Chamber of Commerce of the United States will hold its sixth annual meeting at the Congress Hotel, Chicago, Ill., April 10, 11 and 12. The dominant note of the meeting will be "Business Readjustment to War."

The four critical questions of the day—financing the war, railroads, centralized control of industry, and shipping—will be considered from the two-fold point of view of filling the Government's requirements, but with the minimum disturbance to private industry.

There are more than one thousand local Chambers of Commerce and commercial organizations comprising the membership of the National Chamber of Commerce, which includes even such distant bodies as the American Chambers of Commerce at Shanghai, the Philippines, Alaska, Hawaii, Buenos Aires, Rio de Janeiro, London, Paris, and some half dozen other cities abroad, and each of the

1,000 local members will be represented at Chicago by authorized delegates.

The resolutions of the meeting may truly be said to be an accurate and authoritative expression from American business, and the fullest possible measure of co-operation between business and the Government may be expected to result. As in the past, the speakers will be men of national position.

J. E. Woodwell, consulting engineer, has moved his offices from 8 West Fortieth street, New York, to 501 Fifth avenue.

Raymond E. Brown, contracting engineer, has opened an office at 90 West street, New York, for Heyl & Patterson, Inc., Pittsburgh, builders of special cranes.

Coney Island Construction and Supply Co. announces the removal of its main office to West Seventeenth street and Coney Island Creek, Coney Island, N. Y.

S. H. Widdicombe, of the New York office of Lewis F. Shoemaker & Co., has been placed in charge of the Washington office of that company in the Munsey Building.

Harry W. Alexander, director of publicity for the Society for Electrical Development, New York, recently resigned to become identified with the American Writing Paper Company. Mr. Alexander, who has been prominent in the electrical industry, takes his new position with a wide experience of sales promotion and trade development. Mr. Alexander is succeeded by Roy B. Woolley, now in the society's publicity and sales department, but late of the American Ambulance Field Service, Verdun sector, France. Mr. Woolley was formerly sales manager of the Standard Electric Stove Co., Toledo, and one time associated with the MacManus-Kelley Co., Toledo, and the F. Bissell Co., of Toledo.

American Society for Testing Materials will hold its twenty-first annual meeting at Atlantic City, N. J., June 25-28, with headquarters at the Hotel Traymore.

National Hardwood Lumber Association will hold its twenty-first annual convention in Chicago, Ill., June 20-21. The headquarters will be located at the Congress Hotel.

National Pipe and Supplies Association will hold its annual convention at Cleveland, Ohio, May 13-14, 1918. Headquarters at the Hotel Hollenden.

E. V. Warren, architect, Essex Building, Newark, N. J., is preparing the working drawings for a four-story apartment, to accommodate a total of forty-nine families, to be located on Roscville avenue, between Park and Sixth avenues, Newark, N. J. The owner of this operation is Charles Herbert Walker, Union Building, Newark. The ground dimensions of this building are approximately 100x

127 feet, and the facade will be face brick with trimmings of limestone. The cost is approximately \$150,000.

F. J. Schwartz, architect, with offices in the Colt Building, Paterson, N. J., has been retained to prepare the plans and specifications for the new church and parochial school to be erected in Eighth street, Passaic, N. J., for the Holy Rosary Roman Catholic Church. This operation will cost in the neighborhood of \$100,000. Definite details are not available at this time, and will be announced in a later issue of the "Guide."

James Gamble Rogers, architect, 470 Fourth avenue, New York, is preparing the preliminary sketches for the proposed clubhouse at Bayside, L. I., for the Oakland Golf Club. The structure will be built of stone and brick and will cost in the neighborhood of \$60,000. Complete details of construction have not yet been decided upon and it will be some time before the working plans are completed and ready for estimates.

New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the manage-

ment of Louis W. Buckley. The floor space to be occupied equals 100,000 square feet.

American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building, New York City.

New Jersey State Association of Master Plumbers will hold its annual convention in the East Orange Rink, 15 Halstead street, East Orange, N. J., May 14-16, 1918. State Secretary W. F. Beck, 36 North Center street, Orange, N. J. In connection with this convention there will be an exhibition of manufacturers' and jobbers' supplies. Both the convention and the exhibit will be under the direction of the local associations.

National Metal Trades Association will hold its next convention at the Hotel Astor, April 22 to 25, inclusive. The convention proper is arranged for morning and afternoon sessions on April 24 and 25. As usual, there will be a banquet Wednesday evening, and the preceding days of the convention will be devoted to meetings of the Executive Committee and the Council.

STAIRWAY REGULATIONS

By Virgil D. Allen, Architect

Of all the subjects with which code writers and code enforcing officials have to deal, one of the most, if not the most difficult to handle, is that of stairway regulation.

During my four years experience as Commissioner of Buildings for the City of Cleveland, no important building was erected where the stairway question did not come conspicuously to the front, causing the designer difficulty and frequently bringing the city officials into an unpleasant session with the owner.

Because of this condition and on account of the importance of stairways as means of egress from buildings, I undertook a study of the problem with a view of re-writing the stairway regulations of the Cleveland code. An examination of the literature on the subject disclosed the fact that there had been practically no research or experimental work done, that very little data was available, and even the terminology employed was far from uniform.

A study of the Stairway Regulations found in the Building Codes of the principal cities indicated that each code writer had very largely copied the work of his predecessors so that little information was to be found where the very best should exist.

A survey of the more important buildings of any large city will show a greater

variation in their stairway facilities than in any structural features, which they have in common. Generally the stairways will be found located in spaces which cannot be used for any other purpose, thus demonstrating that the question of earning power was always paramount to the question of safe egress from the building, in case of necessity. In every great building disaster it has been conclusively shown that the means of egress was either not properly designed or located, and usually both.

Generally speaking, in stairway regulations, there is too little consideration given to the different kinds of occupancy. It must be obvious to the most casual observer that stairway requirements should differ materially for school buildings, which are to be used principally by children, from those for theaters, having mixed assemblages in which are found old and young, strong and feeble, of both sexes, or those for factories, office buildings and hospitals.

Any material change in the occupancy of a building should always be accompanied by an inspection by the city officials, of its stairways and other means of egress, and a corresponding change in the stairways be made.

Another factor to be considered is the height of the building. I believe that the height of buildings should be regulated by

the ability of people to escape from the topmost story by means of stairways, in a reasonable length of time.

I made some tests to determine the time required to leave tall buildings by the stairways and was surprised at the amount of time consumed. It is doubtful if any one, other than an athlete, could escape from the top of the tallest buildings in New York City in time to avoid being cut off by fire or smoke in case of a serious conflagration on the lower floors.

Numerous observations made in connection with persons traveling on stairways show that, as a rule, men travel faster than women; individuals faster than couples, and persons who are familiar with a stairway travel much faster than the occasional user. The latter fact is very important and, as far as possible, stairways should be so located that they will be subject to constant use by the occupants of the building, rather than for emergency use only, as the occupants of a building thereby get familiar with the stairway and can use it much faster and more safely than if they were traveling it for the first time.

Another factor, which should be considered, is the travel distance on any given floor from the most remote parts thereof to the nearest stairways.

Many of the buildings codes—and this was true of the Cleveland Code—provided a rule for determining the amount of stairway egress from a building by allowing a minimum width stairway for a given number of square feet floor area, and for additional increments of floor area requiring an additional increase in the width of the stairway in increments of six or nine inches.

A moment's consideration will show how foolish and dangerous this method is. An adult person requires twenty-one to twenty-four inches of width in which to walk downstairs comfortably. Therefore, in order that two persons may travel abreast, a stairway should be not less than three feet wide, while three feet and six inches is a much better width. If to such a 3' 6" wide stairway, an additional increment of six inches is added, the capacity of the stairs is not increased thereby, but rather there is created a danger, inasmuch as in case of panic, two persons, traveling abreast on such a stairway, would leave an interval between them through which a third person would try to pass, with the result that all three would be retarded in their progress, and an excellent chance arise for one of them to be thrown and injured, which would still further block the stairway.

The addition of a second six inches increment only increases the danger and adds nothing to the capacity of the stair. Not until at least three, six inches increments have been added, does the stair show an increased capacity, and even then a stair-

way so designed that three persons may walk abreast is a very unsafe stairway, especially if but one hand rail is provided, as we then have two files of persons without support, except by holding to each other or to the one who has a hand rail support.

Stairways should be made in units for one or two files of persons to travel, and each file should be provided with a hand rail. If a wider stairway is required, it should be in multiples of two files and so designed that every line of persons shall have a hand rail to support them while on the steps. Hand rails should not be carried across landings. The landings should be left clear so that the people can adjust themselves before descending the next flight.

There is great need for an accurate and reasonable rule for determining the number, location and capacity of the stairways required for any building. The principal factors which enter into this problem are:

1. The number of persons on each floor of the building.
2. The height of the building.
3. Its class of construction.
4. The nature of its occupancy.
5. The size of the undivided floor area.
6. The travel distance to stairway.
7. The time in which the building should be cleared of people.

Next in importance after the foregoing, come the questions having to do with the construction of the stairway.

In a recent article, Mr. W. H. Mowery, of the American Museum of Safety, gives the following information concerning accidents and deaths in New York City in the year 1914. He says:

"Last year there were 65 persons killed by fires in Manhattan alone. Surface cars killed 53 and subway cars, 12. In Manhattan, during the same period, there were 68 persons killed by falls on sidewalks and 102 killed by falls on stairs, over half of which were caused directly by slipping."

If it were possible to determine how many of the 65 persons killed by fires, lost their lives due to the insufficiency of stairways, and this number added to the 102, who were killed by falls on stairs, it would show that stairways are more than twice as dangerous as surface and subway cars combined.

I tried to find a rational method of regulating the rise and run of steps and the size of stair landings for the Cleveland Code. For the regulation steps, this took the form of a diagram. It consists of limit lines beyond which, a point determined by using the rise and run of a step as co-ordinates, cannot go. It gives considerable elasticity in the matter of regulating steps, and yet keeps within reasonable conditions in every instance.

There are two opinions concerning the length of landings, which are inserted be-

tween flights to break the continuity of the stair. One is that it need not be more than a long step; the other, that such a landing should be long enough so that one full step is required on the landing before again starting either up or down. We adopted the latter rule in the Cleveland Code.

Much more might be written on this phase of the subject, but I shall only add what I conceive to be the essentials for safe stairway construction.

1. Stairways should be made of such width that every person traveling thereon will have not less than twenty-one inches of clear width.
2. Every file of persons should have a substantial hand rail for support.
3. Every required stairway should be of fireproof construction and enclosed with fireproof, or fire-resisting walls.
4. All openings in stairways should be either fireproof windows, or doors, and the latter should swing into the stairway, be equipped with self-closing and panic hardware and should not, in swinging, obstruct the travel on the landings.
5. All doorways should be wide enough to allow the same number of files of persons to enter the stairways, as the designed capacity of the stairway.
6. The doors should preferably be so located that those entering do not have to change direction after passing the door, before descending the stair.
7. Every stairway should be well lighted.
8. No other openings should be allowed in stairway enclosures, except windows for lighting same, and the required entrance doors.
9. Every stairway should lead directly to the outside of the building, when it reaches the first, or ground floor.
10. The exit door should swing out of the ground floor stair hall.
11. Long flights should not be allowed, and the run and rise should be as near uniform as possible for the entire stairway.
12. The landings should be ample.

Stairways built in conformity with this brief specification, if properly located in a building and of sufficient number, will make it almost impossible for its occupants to be trapped by fire, and will also materially aid the Fire Department in fighting any fire, which may occur.

I should like to suggest a series of experiments which might well be undertaken by the students of some engineering school and used as the basis of a thesis.

An adjustable stairway should be constructed so that the rise and run could be readily changed through considerable limits. Then men and women, and possibly children, should be caused to ascend and descend these stairs, probably blindfolded and depending upon a rope for sup-

port against falling, and their judgment carefully recorded as to the ease and facility with which they travel the various combinations of rise and run.

Possibly a winding stair might be used in these experiments, so that the person ascending, or descending, could automatically find the line where travel would be most comfortable to them.

These experiments should be tried with persons of different height, say 5 feet, 4 inches; 5 feet, 8 inches and 6 feet. The length of the foot of the individual should also be noted.

At the end of two years' study we started to write a new set of stairway regulations for the Cleveland Code. A series of definitions was the first thing written. These definitions, which follow—while no doubt both imperfect and incomplete—are, in my opinion, a decided advance over those to be found in other building codes or books dealing with stairway construction.

Definitions.

- (a) Tread—The horizontal part of a stair step.
- (b) Riser—The vertical part of a stair step.
- (c) Winder—A tread that is wider at one end than at the other.
- (d) Step—One tread and one riser.
- (e) Rise—The vertical distance between the tops of the adjacent treads, or between the top of the tread and the adjacent landing.
- (f) Run—The shortest horizontal distance between adjacent risers, or between corresponding points of adjacent treads.
- (g) Landing—A level space larger than a tread between two flights of a stair.
- (h) Quarter Space Landing—A landing where the flight changes direction approximately 90 degrees.
- (i) Half-Space Landing—A landing where the flight changes direction approximately 180 degrees.
- (j) Floor Landing—That part of any floor within the stairway enclosure which is used in passing from one flight to another.
- (k) Well—The open space in the center of a stairway, or around which the stairs are built.
- (l) Flight—An unbroken succession of steps between landings.
- (m) Single Width Flight—One wide enough for persons to travel in single file.
- (n) Double Width Flight—One wide enough for two (2) persons to travel side by side, or in double file.
- (o) Multiple Width Flight—A combination of two (2) or more double flights.
- (p) Stairway—All the flights and landings between two successive floor levels.
- (q) Stairway—All the flights and landings, together with the enclosing walls or partitions and the doors leading thereto and therefrom, extending from the exit level to and including all stories served by such stairs.
- (r) Continuous Stairway—One extending unbrokenly from the exit level to the most remote story served thereby.

In conclusion, I wish to urge upon code writers and students of safety in general the importance of producing a scientific set of stairway regulations.

—“Ohio Architect and Builder.”

GETTING AHEAD.

I know an old fellow—a kindly old man,
Who's worked all his life at the trade;
He's a good steady worker, he pegs right
along,

But somehow he don't get ahead.

To watch the old codger you'd think he'd do
more

Than 'most any man, but instead

This plodding old geezer always comes out be-
hind

'Cause, bless him! he don't use his head.

Ought to watch him cut moulding! It sure
was a sight

To see him as benchward he sped

To his friend Mitre Box, where he interview-
ed it,

For he hated to "bother his head."

His tools are all scattered; some here and some
there—

"Couldn't keep 'em corralled," as he said;

But he'd make better time and save many
steps,

If the old fellow could but get a head!

—Hugh MacLure, in "National Builder.

SIMPLE, WHEN YOU UNDERSTAND IT.

A large blueprint, covered with a mass of straight and curved and dotted lines, figures and symbols, had been found on the prisoner, and was now being examined critically by the chief of the secret service and his assistants; but they were unable to make it out.

"It looks to me," said the chief, "like it was the groundplan of one of our large munitions plants. You observe that here is the main building, here the magazines and storage warehouses, the railroads running into the plant here, and here the tenements where the employees are housed. However, we will call in Jones, one of our men who used to be in the building business and had to work from a good many of these things. Hey, Jones!"

Jones came in, and the blueprint was spread out before him. "It is somewhat intricate," said the chief, "but maybe you can tell us what it is."

"Easy," replied Jones. "It's an architect's drawing of a dormer window." "The Architect and Engineer," of California.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities. The moral is—when you go duck shooting do your shooting where you know the ducks to be!

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Dwellings (8), Sixty-fifth and Regent streets, Philadelphia, \$24,000. Architect, private plans. Owner, H. F. Kettman, 2434 West Clearfield street, Philadelphia. Brick, 2 stories, 15x26 feet, slag roof, hot air heating, electric lighting, tile and marble work, hardwood floors. Owner will build.

Residences (28), Hutchinson and Courtland streets, Philadelphia, \$71,000. Architect, private plans. Owner, Daniel Crawford, Jr., 701 North Sixty-third street, Philadelphia. Stone and tile, 3 stories, 25x37 feet, stone foundations, slate roof, hot water heating, electric lighting, tile and marble work, hardwood floors. Owner will build.

Residences (5) (2 family), Twentieth and Ontario streets, \$22,000. Architect, private plans. Owner's name withheld. Brick, 3 and 2 stories, (1) 24x39½ feet and (4) 20x31 feet, slag roof, composition floors, vapor heating, stone foundations, tile work, plumbing. Wm. T. Robinson, 1508 Lombard street, is taking sub-bids, due as soon as possible.

Garage (add. to School), 924 Spring street, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick, 1 story, 48x14 feet, composition roof, cement floors, concrete foundations, extension to steam heating system. Owners taking bids, due April 4th. Mitchell Bros., 2125 Race street; J. H. Jordan, Thirty-first and Oxford street; T. C. Trafford, 1613 Sansom street, and Wm. Mundy, 228 South Alder street; J. Sims Wilson Co., 1125 Brown street; Hogg Const. Co., 1634 Sansom street; F. A. Havens & Co., 845 North Nineteenth street, are figuring.

School (alts.), southeast corner of Palmetta and Bleigh streets. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Consists of interior alterations, mill work, etc. Owners taking bids, due April 4th. Mitchell Bros., 2125 Race street; Wm. Mundy, 228 South Alder street, and J. H. Jordan, Thirty-first and Oxford streets, are figuring.

School (alts.), Fifty-seventh and Haverford avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Stone, brick and reinforced concrete, 3 stories and basement, composition and slate roof (steam heat, electric light reserved), copper roof, cement, maple and mastic and asphalt floors, hollow tile, metal lath, hollow metal skylights, fire doors, fire escapes, roof ventilators, metal weatherstrips, metal ceilings, wire work, ornamental iron work. Owners taking bids, due April 4th. Pringle Borthwick, 8018 Germantown avenue; F. A. Havens & Co., 845 North Nineteenth street, and Warren-Moore Co., Colonial Trust Building, additional bidders.

Store, Twentieth and Snyder avenue, Philadelphia. Architects, Honon & Boyle, Fuller

Lang, Philadelphia. Owner, John T. Sommers, on premises. Brick, stone work, painting, glazing, 1 story, electric lighting. Architects have received bids.

Residence, Mt. Airy, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner's name withheld. Stone, 2½ stories, 31½x45½ feet, stone foundations, slate roof, hot water heating, electric lighting, tile and marble work, hardwood floors. Plans in progress. Architect will be ready for bids in ten days.

Garage, Navy Yard, Philadelphia, Spec. No. 2888. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Washington, D. C. Brick, steel and reinforced concrete, 1 story, 62x142 feet, slag or gypsum roof, concrete floors, steam heating, electric lighting, rolled steel sash, hollow metal doors, hollow tile, safety treads, dampproofing, ornamental iron work (gasoline storage system reserved). Owners taking bids, due April 3rd at 4 P. M. Warren-Moore Co., Colonial Trust Building; Ketcham & McQuade, 1029 Brown street; Thos. Reilly, 1616 Thompson street; Wark-Yardley Co., 1737 Filbert street, and Hughes-Foulkrod Co., Commonwealth Building, are figuring.

Store and Dwelling and Garage and Shop, 7046 Woodland avenue, \$25,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Dayton W. Laubach, 7038 Woodland avenue, Philadelphia. Brick and terra cotta, 3 stories, 25x185 feet, stone and concrete foundations, hot water heating, combination lighting, tile and marble work, wood-oleum, hardwood and tile floors, metal lath, hollow metal skylights, metal bulks, ventilators, waterproofing. Architect taking bids, due April 6th. Hogg Const. Co., 1634 Sansom street; Lo Roy B. Smith, Forty-first and Chester avenue; John H. Wolf, 4325 Pennsgrove street; W. J. Irvin, 5927 Kingessing avenue, and Christian Hansen, East Lansdowne, Pa., are figuring.

Garage (4 cars), southwest corner of Thirty-sixth and Pearl streets, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, James D. Winchell, 1701 Sansom street, Philadelphia. Brick, 1 story, stone foundations, 45x20 feet, slag roof, cement floors, electric lighting. Plans completed. Owner is taking sub-bids.

Boiler House (alt.), Pelham Road and Horter street, Germantown. Architect, Wm. H. Timm, Abbot Building, Philadelphia. Owners, Germantown Steam Co., 349 West Horter street, Philadelphia. Brick, 1 story, 32x45 feet, electric lighting, cement floors, hollow metal sash and skylights and doors. Architect has received bids.

Garage, Sixth and Marshall streets, Philadelphia. Architect, private plans. Owner, Geo. G. Melloy, 1419 Spring Garden street, Philadelphia. Brick, 1 story, slag roof, cement

floors (heating, lighting and gasoline storage system reserved). Owner taking bids, due April 4th. Horace H. Burrell, 206 South Quince street, is figuring.

Garage, 1310-18 North Fifth street, Philadelphia. Owner, I. Cohen, 1330 North Fifth street, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Brick, steel and concrete, 2 stories, 75x190 feet, stone foundations, slag roof, slag, stone and yellow pine floors, electric lighting, rolled steel sash, hollow metal skylights, fire doors, ornamental iron work (heating and gasoline storage system reserved). Architect is taking sub-bids.

Store (alt. and add.), 507-09 Commerce street and 510-24 Cuthbert street. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owners, Supple Biddle Hardware Co., on premises. Reinforced concrete and brick, 6 stories, 24x12 feet, metal lath, hollow metal skylights, fire doors. Architect taking bids, due April 3rd. H. H. Burrell, 206 South Quince street; H. E. Grau, 1707 Sansom street; Stacy Reeves & Son, 2011 Market street, and J. Sims Wilson Co., 1125 Brown street, are figuring.

Sorting Shop, Tracer and Incendary Composition House, Eakin Street Tunnel, Officers' Quarters and Alterations to Haguer Road E. R. Sidings and Crossing, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Montgomery, Frankford Arsenal, Philadelphia. Reinforced concrete, brick, stone and granite, 2½ stories, 115x44 feet; 1 story and basement, 102x40 feet; 2½ stories, 27x54 feet, slate and slag roofs, cement, composition and maple floors, hollow tile, metal lath, electric elevators, roof ventilators, vacuum heating, electric lighting, tile and marble work, rolled steel sash, fire doors, Kalamein doors, ornamental iron work, waterproofing, wire work. Owners taking bids, due April 5th. Wm. R. Dougherty, 1610 Sansom street; W. W. Anstine & Co., 1218 Filbert street; Ketcham & McQuade, 1029 Brown street; Monaghan & Losse, Inc., 3016 Chestnut street; Wm. Steele & Sons Co., 34 South Fifteenth street; Wark-Yardley Co., 1737 Filbert street, are figuring.

Store (alt.), 5615 Germantown avenue. Architect, W. H. Wooters, 816 Allegheny avenue, Philadelphia. Owner, C. A. Rowell, 1615 West Susquehanna avenue, Philadelphia. Mill work, brick work, interior alterations. Architect has received bids.

School (alts.), Twelfth and Locust streets, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. New partitions and mill work, maple floors. Owners taking bids, due April 4th. Mitchell Bros., 2125 Race street; E. C. Durell, 1713 North Twenty-fourth street; and J. H. Jordan, Thirty-first and Oxford streets; F. A. Havens, 845 North Nineteenth street; J. Sims Wilson Co., 1125 Brown street, are figuring.

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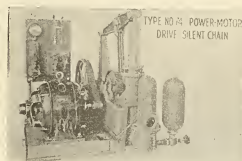
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Residence, Sixtieth and Master streets, Philadelphia. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owners, Calvin Presbyterian Church, care of Rev. F. Hort, 550 North Sixty-third street. Stone, 2½ stories, 17x48 feet, slate roof, warm air heating, tile work, hardwood floors, electric lighting. J. Richard Jackson, Perry Building, Philadelphia, is figuring and is taking sub-bids. (Only bidder.)

Factory (add.), Forty-ninth and Parkside avenue, Philadelphia. Architects, Andrew J. Sauer Co., 908 Chestnut street, Philadelphia. Owners, Cunningham Piano Co., 1101 Chestnut street, Philadelphia. Reinforced concrete and brick, 1 story, 64x78 feet, slag roof, electric lighting, concrete floors, hollow metal skylights, fire doors, waterproofing. Architects taking bids, due April 3rd. Frank G. Stewart, 1619 Sanson street, Conneen Const. Co., 1737 Filbert street; P. Halbach Const. Co., Twenty-sixth and Thompson streets; J. Sims Wilson Co., 1125 Brown street, are figuring.

Residence (alts. and add.) to apartments and store, S. W. Cor. Forty-second and Parkside avenue. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, name withheld. Brick, interior alterations, rear addition, 1 story, 20x12 feet, front addition, 1 story, 18x12 feet, canvas and slag roof, hardwood floors, hot water heating, combination lighting, tile and marble work, flush bulks. Plans in progress. Will take bids in about two weeks.

Office Building, East Tioga and Richmond streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owners, Girard Smelting Co., on premises. Brick, 1 story, 20x61 feet, stone foundations, slag roof, hardwood floors, hot water heating, electric lighting, plumbing, cement work, cabinet work, hollow metal skylights, lockers (metal), steel and timber rafters and slag roof over driveway, 21x60 feet. Plans about completed. Owner will take sub-bids in one week.

Residence (alt. and add.), 908 South Fifth street, Philadelphia. Architect, Herman Kline, Sixth and Mifflin streets. Owner, Dr. M. Kohn, 908 South Fifth street, Philadelphia. Brick, 3 stories, addition 22x14 feet, slag roof, hardwood floors, electric lighting, tile work, painting. Owner is sub-letting.

Baggage Room (alts.), 1004-26 Spring Gar-

den street, Philadelphia. Architect, J. Morris Daniels, 252 South Juniper street, Philadelphia. Owners, Union Transfer Co., Real Estate Trust Building, Philadelphia. New offices, toilets and lockers, steam heating, electric lighting, hollow metal skylights, hemlock, maple and concrete floors, metal lath. Owners taking bids, due April 5th. F. B. Davis, 240

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North Sixteenth street, is figuring.

Factory, 70-72 Morris street, Philadelphia, \$70,000. Architect, Peter S. Gilechrist, Charlotte, N. C. Owners, Baugh & Sons Co., 20 S. Delaware avenue, Philadelphia. Brick and iron on iron frame, 1 story, 75x154 feet, 75x135 feet, 75x30 feet, slag roof, cement floors. Owners will build.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Factory Building, Sixth and Tabor Road, Philadelphia. Architect, private plans. Owner's name withheld. Brick, 1 story, 40x100 feet, slag roof, cement floors. Contract awarded to Wm. J. Gmiller Co., 219 East High street.

Store Building, 1312 Walnut street, Philadelphia, \$13,000. Architects, Hoffman Co., Finance Building, Philadelphia. Owner, Max Dann, Colomade Hotel, Philadelphia. Consists of new front, interior alterations, etc. Contract awarded to Ketcham & McQuade, 1029 Brown street.

Residence (int. alts.), 15-17 West Upsal street, Germantown. Architect, George I. Lovatt, 416 Walnut street, Philadelphia. Owner, M. H. Lee, 17 West Upsal street, Germantown. Brick work, stone work, mill work, plastering, tile work, hardwood floors. Contract awarded to Samuel Harting, 20 East Johnson street.

Water Supply Fire Protection and Drainage, Taup street yard, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Clay and shale pipe, concrete work, lumber and iron, brick work, iron stairs. Contract awarded to Huffman-Conklin Co., Columbus, Ohio.

Store Room and Apartment (alt.), 14-16 S. Fifty-second street, \$4,000. Architect, Wm. H. Meyer, 1861 Carter avenue, Bronx, N. Y. Owner, M. Steppacher, care of Mastbaum Bro. & Fleisher, 424 South Penn Square, Philadelphia.

Lessee, L. K. Liggett, New York City. Brick, 3 stories, 36x50 feet, tile, oak and concrete floors, tile and marble work, metal ceilings, fire escapes, ornamental iron work. Contract awarded to Smith-Hardican Co., 1606 Cherry street.

Stable, rear of 410 Race street. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Whittall, Tatum & Co., 410-16 Race street, Philadelphia. Mill work and new stalls, cement and plank floors. Contract awarded to H. E. Grau Co., 1709 Sanson street.

Factory (int. alts.), 1732 North Randolph street. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, McNeely & Co., on premises. Consists of interior alterations, cement floors. Contract awarded to F. B. Davis, 240 North Sixteenth street, Philadelphia.

Office Building, Richmond, Philadelphia. Architect, private plans. Owners, The Wm. Cramp & Sons Ship & Engine Building Co., Beach and Ball streets, Philadelphia. Brick, stone and reinforced concrete, 9 stories, 144x50 feet, tile roof, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash, hollow metal doors, iron stairs, or namental iron work, mosaic, pine and cement floors, hollow tile, elevators, waterproofing, wire work. Contract awarded to Stacy Reeves & Sons, 2011 Market street.

Dry Kilns (3), Margaret street and P. R. R., Philadelphia, \$20,000. Architect, P. M. Sax, Franklin Bank Building, Philadelphia. Own-

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Soundings
JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.

ers, Schwarz Wheel Co., on premises. Brick, 60x60 feet, concrete, tile and slag roof. Contract awarded to P. M. Sax, Franklin Bank Building, Philadelphia.

Store Building (alts.), northeast corner of Eleventh and Chestnut streets, \$7,500. Architect, private plans. Owner, John B. Miller, Land Title Building, Philadelphia. Brick and terra cotta, new front, 4 stories, cement, tile and pine floors, hot water heating, tile and terrazzo work (lighting reserved). Contract awarded to John V. Speth & Co., 1615 Sansom street.

Factory, Allegheny avenue and Hancock

Bell Phone: Market 3158

Keystone Phone: Main 174

ROMAN MOSAIC & TILE CO., Inc.

MARBLE MOSAICS, TERRAZZO, CERAMICS, TILES

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PHILADELPHIA, PENNA.

street, Philadelphia, \$11,000. Architect, private plans. Owners, J. R. Keim & Co., Inc., care of Allen R. Mitchell, Sr., president, on premises. Brick, 1 story, 40x50 feet and 40x15 feet, slag roof, maple floors, stone foundations, rolled steel sash and skylights, fire doors (heating, lighting and plumbing reserved). Contract awarded to Robt. E. Lamb Co., 843 North Nineteenth street.

roof, pine floors (hot water heating, electric lighting and plumbing, reserved). Owners ready for bids.

Residence, Dunmore, Pa. Architect, J. J. Howley, Traders Bank Building, Scranton, Pa. Owner, M. J. Dempsey, Dunmore, Pa. Frame and stucco, 2½ stories, 32x38 feet, slate roof, steam heating, electric lighting, pine floors. Owner taking bids. Hower & Stender and the Noy Aug Lumber Co., both of Scranton, Pa., are figuring.

Store (alt.), Forest City, Pa. Architect, J. H. Davey, Coal Exchange Building, Scranton, Pa. Owner, Max Heller, Forest City, Pa. Brick, 1 story, metal bulks, metal ceilings. Plans completed. Owner ready for bids.

Store (alt.), Hazleton, Pa. Architect, Geo. F. Schrader, Weitzkorn Building, Wilkes-Barre, Pa. Owner, Clarence Lasso, Hazleton, Pa. Brick, 1 story, electric lighting, tile and marble work, hardwood floors, flush bulks. Plans in progress.

Theatre (alt.), Freeland, Pa. Architect, J. Howley, Traders Bank Building, Scranton, Pa. Owner, Freeland Opera House, Freeland, Pa. Consists of general interior alterations, painting, plastering, carpenter work, reinforced floors. Will take bids in a week.

Nurses' Home Annex, Norristown, Pa. 28,000. Architect, Harry G. McMurtrie, 1012 Walnut street, Philadelphia. Owner, State Hospital for the Insane, Norristown, Pa. Brick, 3 stories and basement, 45x65 feet, slate roof, maple floors, steam heating, electric lighting, fire escape. Plans in progress. Will be ready for bids in two weeks.

School, Old Forge, Pa. Architects, Duckworth Bros., Coal Exchange Building, Scranton, Pa. Owner, School District of Old Forge, Old Forge, Pa. Frame, 1 story, slate and slag roof, steam heating, electric lighting, pine floors (heating, plumbing, ventilating and sewage system, reserved). Owner has received bids.

Store (alt. and add.), Penn avenue. Scranton, Pa. Architects, Morris & MacHale, Burr Building, Scranton, Pa. Owner, W. H. Coons Co., Penn avenue, Scranton, Pa. Brick, 1 story, mill work, electric lighting, marble work, composition floors. Architects taking bids, due as soon as possible. Hagen Lumber Co., Stender Bros., Washburn & Williams, and Hower & Stender, all of Scranton, are figuring.

Orphanage, Nanticoke, Pa. Architects, Morris & MacHale, Burr Building, Scranton, Pa. Owner, St. Stanislaus Orphanage, care of architects. Hollow tile and stucco, 2 stories

PENNSYLVANIA

Construction News

Hospital Ward Building "J," Farview, Wayne County, Pa. Architect, J. M. Shirk, 421 Chestnut street, Philadelphia. Owners, State Hospital for Criminal Insane, H. G. Ashmead, secretary, Room 284, City Hall, Philadelphia. Brick and steel, 2½ stories, 97x37 feet, slate and slag roof, cement floors, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel skylights, fire doors, iron stairs, hollow tile, metal lath, elevators, roof ventilators, ornamental iron work, wire work. Owners taking revised bids, due April 4th. Roydhouse-Arcy Co., 12 North Broad street; Ludwig T. Stipp, Hagen Lumber Co., Hower & Stender, and Peter Stipp & Son, all of Scranton, are figuring.

Residences (Twin) (3 pairs), Collingdale, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Christian Hansen, West Lansdowne, Pa. Stone foundations, stone, brick and stucco, 2 stories, 15x40 feet, asbestos shingle and slag roof, yellow pine floors, hot air heating, combination lighting. Owner is taking sub-bids.

Bungalow, Bethlehem, Pa. Architect, J. R. Wilt, 47 South Fourth avenue, Bethlehem, Pa., West Side. Owner, S. Shamaanco, Bethlehem, Pa., South Side. Frame, 1½ stories, 30x48 feet, stone and concrete foundations, slate roof. Owner is taking sub-bids.

Bungalow, Bethlehem, Pa. Architect, J. R. Wilt, 47 South Fourth avenue, Bethlehem, Pa., West Side. Owner, Charles Zinger, 225 West Market street, Bethlehem, Pa. Frame and stucco, 1½ stories, 30x46 feet, asbestos and slate roof, hot water heating, plumbing. Owner is taking sub-bids.

Residences (8), Chester, Pa. Architect, private plans. Owner, R. H. Scroggins, Crozer

Building, Chester, Pa. Brick, 2 stories, rubberoid and slag roof, pine floors. Owner will build.

Residence (alts. to Apartments), Lansdowne, Pa. Architects, Hancock & Hokenson, Bailey Building, Philadelphia. Owner, Dr. W. F. Kennedy, Lansdowne, Pa. Frame, 3 stories, 20x20 feet, tin roof, hot water heating, electric lighting, tile work, pine and hardwood floors. Architects taking bids, due April 4th. Fesmire Bros., Glenside, Pa.; F. B. Davis, 240 North Sixteenth street; Geo. W. Riley, J. Howard Roberts, both of Lansdowne, Pa., and Tynas Bros., East Lansdowne, Pa., are figuring on revised plans.

Residence (alts.), Cynwyd, Pa. Architects, Savery & Schetz, Stephen Girard Building, Philadelphia. Owner, J. Raymond Jones, State Road, Cynwyd, Pa. Consists of interior alterations, 3 stories, new bath, shingle roof (plumbing and heating reserved). Architects have received bids.

Garage and Laundry, Overbrook, Pa. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owner, Le Roy K. Leas, Overbrook, Pa. Brick and stucco, 1 and 2 stories, 30x26 feet and 20x28 feet, slate and shingle roof, cement and pine floors, hollow tile (electric lighting, plumbing and heating reserved), waterproofing and dampproofing. Architect taking bids, due April 3rd. J. D. Lengle, Wayne, Pa.; Geo. L. Crell, Rosemont, Pa.; Milton W. Young, Overbrook, Pa.; Samuel Harting, 20 East Johnson street, and Wills-Ludwick Co., 34 South Seventeenth street, are figuring.

School, Throop, Pa. Architect, J. J. Howley, Scranton, Pa. Owner, School District of Throop, Pa. Brick, 2 stories, 153x95 feet, slag

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and basement, 130x120 feet, tile roof, hardwood and composition floors, hollow tile, metal lath, fire towers, safety treads, iron stairs, hollow metal skylights, tile work (steam heating, electric lighting and plumbing, reserved). Architects taking bids, due April 8th. Joseph Kroft, Scranton, Pa.; Butz & Clader, Allentown, Pa., are figuring, in addition to those previously reported.

Bungalow, Oakland Park, Del. Co., Pa. Architects, Custer & Gill, Camden, N. J. Owner, Mr. Bretz, care of Oakland Park Realty Co., Oakland Park, Pa. Frame, 1 story, 24x40 feet, shingle roof, pine floors, gas lighting. Plans in progress. Owner will take bids in one week.

Hospital Ward Building "J," Fairview, Wayne Co., Pa. Architect, J. M. Shirk, 421 Chestnut street, Philadelphia. Owner, State Hospital for Criminal Insane, H. G. Ashmead, Secretary, 284 City Hall, Philadelphia. Brick and steel, 2½ stories, 97x37 feet, slate and slag roof, cement floors, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel skylights, fire doors, iron stairs, hollow tile, metal lath, elevators, roof ventilators, ornamental iron work, wire work. Owners taking revised bids, due April 4th.

Barn, near Newtown, Pa., \$10,000. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, J. J. Tierney, Newtown, Pa. Stone and frame, 2 stories, 100x100 feet, shingle roof, pine and concrete floors. Architect taking bids, due April 14th. John K. La Rue, Wrightstown, Pa.; C. Yardley Stradling, Oxford Valley, Pa., and Joseph T. Taylor, Langhorne, Pa., are figuring.

Residence (alt. and add.), Wynnewood, Pa. Architect, H. J. Wetherill, 10 South Eighthteenth street, Philadelphia. Owner, Webster K. Wetherill, 126 South Thirtieth street, Phila-

delphia. Stone, 1 story, 15x18 feet, shingle roof, pine floors, electric lighting, heating extension, tile work, waterproofing. Architect taking bids, due April 3rd. P. B. Davis, 240 North Sixteenth street, is figuring.

School, East Fallowfield, Chester County, Pa. Architect, M. I. Kast, 222 Market street, Harrisburg, Pa. Owner, E. C. Phillips, secretary, Board of Education, Coatesville, Pa. Brick, 1 story and basement, 69x101 feet, composition roof, pine floors, steam or hot air heating, electric lighting, hollow tile, roof ventilators. Ready for bids in ten days.

Machine Shop, Centre street, Millersburg, Pa. Architect, T. H. Hamilton, 11 North Second street, Harrisburg, Pa. Owners, Brubaker Bros., Centre street, Millersburg, Pa. Brick, slow burning, 1 story, 75x100 feet, slag and tin roof, stone foundations (heating reserved), hollow metal sash and skylights, cement floors. Architect taking bids, due as soon as possible. Howard Helwig, Moore street, Millersburg, Pa., is figuring.

Bungalow, East Main street, Hummelstown, Pa. Architect, G. H. Grove, 213 Walnut street, Harrisburg, Pa. Owner, Wm. Longanacker, Hummelstown, Pa. Brick, 1 story, 32x32 feet and 10x18 feet, slate roof, stone foundations, steam heating, electric lighting, hardwood floors. Architect taking sub-bids, due as soon as possible.

Storehouse (alts.), 1117 North Third street, Harrisburg, Pa., \$10,000. Architect, G. H. Grove, 213 Walnut street, Harrisburg, Pa. Owner, J. E. Hemperley, 1117 North Third street, Philadelphia. Brick and steel, 3 and 1 stories, slag roof, steam heating, electric lighting, hollow metal skylights, fire escapes, pine floors. Owners taking bids, due as soon as possible. F. L. Morrow, 3221 North Third street, Harrisburg, Pa., is figuring.

PENNSYLVANIA Contracts Awarded

County Court House (alt.), Honesdale, Pa. Architects, Duckworth Bros., Coal Exchange Building, Scranton, Pa. Owner, Wayne Co. Dept. of Public Buildings, Honesdale, Pa. Brick, 2 stories, 140x120 feet, general interior alterations, lighting fixtures. Contract awarded to Hartman Elect. Const. Co., Scranton, Pa.

Church, Forest City, Pa. Architect, J. J. 'Vowley, Traders Bank Building, Scranton, Pa. Owner, St. Agnes' R. C. Church, Forest City, Pa. Frame, 1 story and basement, 40x120 feet, slate roof, pine floors, steam heating, electric lighting. Contract awarded to

Forest City Lumber Co., Forest City, Pa.

Store (alt.), 429 Lackawanna avenue, Scranton, Pa. Architect, H. C. Rutherford, Scranton, Pa. Owners, Kleeman & French, on premises. Brick, 1 story, metal bulks. Contract awarded to E. A. Fuller, Scranton, Pa.

Residence and Stable (alt. and add.), Ashbourne Road, Elkins Park, Pa. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Chas. Silberman, care of architect. Hollow tile and stone, 40x30 feet, wing 28x26 feet; stable, 2 stories, stone foundations, slate roof, hardwood and cement floors,

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hot water heating, electric lighting, tile and marble work. Contract awarded to Stacy Reeves & Sons, 2011 Market street, Philadelphia.

Club House, Third and Bonas streets, Harrisburg, Pa., \$3,500. Architect, private plans. Owners, Loyal Order of Moose, Harrisburg, Pa. New wall and interior alterations, plastering, mill work, electric lighting. Contract awarded to Elmer J. Stuckey, S. Earlington, Harrisburg, Pa.

Office Building (alts.), 18-22 South Third street, Harrisburg, Pa., \$25,000. Architect, private plans. Owners, J. L. L. Kuhn & W. K. Myers, 2112 North Third street, Harrisburg, Pa. Reinforced concrete floors (6 stories) and interior alterations. Contract awarded to J. L. L. Kuhn, Second and Washington streets, Harrisburg, Pa.

Garage, 1741 North Third street, Harrisburg, Pa., \$2,000. Architect, private plans. Owner, Harvey C. Koons, 2121 North Third street, Harrisburg, Pa. Brick 1 story, 29x35 feet, slag roof, concrete floors, steam heating, electric lighting (gasoline storage system reserved). Contract awarded to James Koons, Third and Kelker streets, Harrisburg, Pa.

Power Plant and Equipment, Clifton Heights, Pa. Architect, Private plans. Consulting Engineers, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Kent Manufacturing Co., Clifton Heights, Pa. Brick, 1 story, 47x60 feet, slag roof, rolled steel sash, cement work. Contract awarded to D. J. McNamee, 1621 North Fifteenth street, Philadelphia.

New Jersey Construction News

School, Glassboro, N. J., \$74,000. Architects, Moffett & Stewart, Inc., 30 North Third street, Camden, N. J. Owner, Board of Education, Glassboro, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet, slag roof (steam heating, electric lighting, plumbing, furniture, reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamain doors, dampproofing, ornamental iron work. Architect will take new bids, due

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HEATING

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April 9th. R. C. Ballinger & Co., 218 North Thirteenth street; Evans Const. Co., 9 South Eighteenth street; Wills-Ludwick Co., 34 South Seventeenth street; Metzger & Fisher, Otis Building, Philadelphia; Peterson Const. Co., Clayton, N. J.; Geo. W. Shaner & Son, Palmyra, N. J.; Geo. Bachman, 19 North Thirtieth street, Camden, N. J.; Frank C. Ware, Glassboro, N. J.; Wesley B. Porch and W. Beaumont, both of Atlantic City, N. J., are figuring.

Tenant House, Moorestown, N. J. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, E. Wallis Armstrong, Moorestown, N. J. Concrete and hollow tile, 2½ stories, 25x27 feet, single roof, hot air heating, electric lighting, yellow pine floors. Architect taking bids, due April 10th. Geo. W. Shaner, Palmyra, N. J.; Hugh B. Miller, Edgewater Park, N. J.; Joseph E. Kolster, Beverly, N. J., and Smith & Stavelly, Riverton, N. J., are figuring.

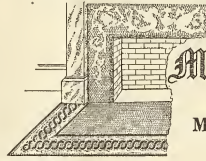
Group of Buildings, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame and brick, 1 story. Garage, 26x23 feet; gate house, 18x11 feet; pump house, 12x5 feet; power house, 55x36 feet; coal bin, 60x36 feet; officers' building, 90x27 feet; laundry building, 96x31 feet; isolation group gallery, 80x40 feet; brick and guard house, 79x27 feet; dispensary, 110x23 feet; receiving building, 148x60 feet; barracks, 95x27 feet, ready roofing, cement and pine floors, electric lighting, fire doors, metal lath. Owners taking revised bids, due April 5. The following are figuring: Cramp & Co., Denckla Building; Edward Pay & Son, 9 S. Mole street; Wm. Linker Co., 831 Cherry street, and H. H. Wehmeyer, 1004 West Lehigh avenue.

Residence, Wenonah, N. J. Architects, Morris & Erskine, 1420 Chestnut street, Philadelphia. Owner, Oscar Redrow, Wenonah, N. J. Stone, brick and stucco, 2½ stories, 61x33 feet, slate and tin roof, cement and pine floors, stone foundations (heating and lighting reserved). Architects have received bids.

Y. M. C. A. Building (alts. and add.), 508 East State street, Trenton, N. J. Architect, private plans. Owners-Lessee, P. R. R. Y. M. C. A., care of Real Estate Dept., Trenton, N. J. Brick, 3 stories, 15 rooms, consists of pool rooms, auditorium, shower baths, carpenter work. Work contemplated.

Garage and Cold Storage Building, 51 Belview avenue, Trenton, N. J., \$8,000. Architect, Robert Schuman, 932 Lamberton street, Trenton, N. J. Owner, I. Wagner, Trenton, N. J. Brick, 2 stories, 25x100 feet, slag roof, concrete floors, steam heating, electric lighting, hollow metal sash, fire doors, metal lath. Architect taking bids, due April 8th. J. H. Morris, Broad Street Bank Building; S. Deikneit, 440 West Hanover street; Chas. Barlow, Broad Street Bank Building; Paul G. Wolf, 630 Anderson street, all of Trenton, N. J., are figuring.

Bridge, Assanpink Creek, East of Olden avenue, Trenton, N. J. Engineer, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owners, City of Trenton, N. J., Leon D.



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Hirsch, City Clerk, Trenton, N. J. Concrete and steel. Owners taking bids, due April 5th, 2.30 P. M. N. A. K. Bugbee, Trenton, N. J., is figuring.

School of Industrial Art, Quarry street, Trenton, N. J. Architect, J. O. Hunt, 114 N. Montgomery street, Trenton, N. J. Owners, City of Trenton, Leon D. Hirsch, City Clerk, Trenton, N. J. Brick, 2 stories and basement, 80x70 feet and 25x60 feet, slag roof (steam heating, plumbing and electric work reserved), concrete and wood floors, rolled steel sash, metal lath. Owners taking bids, due April 10th at 2.30 P. M. C. Y. Barlow, Broad Street Bank Building; James H. Morris, Broad Street Bank Building; Fred Parker, Calhoun street; P. Ungaro, 155 North Warren street; Jos. P. Barlow, 544 Garfield avenue; Harry Hilton, Forst Richie Building, and Burton & Burton, American Mechanics' Building, all of Trenton, N. J., are figuring.

Crematory, Southard street, Trenton, N. J. Architect, A. C. Gregory, City Hall, Trenton, N. J. Owners, Board of Commissioners, City Hall, Trenton, N. J. Brick, 2½ stories, 48x30 feet, slag roof, electric lighting. Owners taking new bids, due April 5th. J. H. Morris, Broad Street Bank Building, and S. W. Mather & Son, Greenwood and Canal streets, Trenton, N. J., are figuring.

Administration Building and Garage, Camp Dix, Wrightstown, N. J. Architect, private plans. Owners, Jewish Welfare Workers, Camp Dix, N. J. Frame, 1 story, 47x57 feet, ready roof, pine floors, stone foundations, electric lighting. Frank E. Hahn, 1112 Chestnut street, Philadelphia, taking bids, due April 8th. Lam Building Co., 1001 Wood street; Smith-Hardican Co., 1606 Cherry street, Philadelphia; George W. Shaner, Palmyra, N. J., and J. S. Rogers Co., Moorestown, N. J., are figuring.

Group of Buildings, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame and brick, 1 story. Garage, 26x23 feet; gate house, 18x11 feet; sump house, 12x9 feet; power house, 55x36 feet; coal bin, 60x36 feet; officers' building, 90x27 feet; laundry building, 96x31 feet; isolation group gallery, 80x40 feet; brig and guard house, 79x27 feet; dispensary, 110x23 feet; receiving building, 148x60 feet; barracks, 95x27 feet, ready roofing, cement and pine floors, steam heating, electric lighting, fire doors, metal lath. Owners taking revised bids, due April 8th. Cramp & Co., Denckla Building; Wm. Linker Co., 831 Cherry street; Ed. Pay & Son, 2 South Mole street, are figuring.

NEW JERSEY

Contracts Awarded

Store Building (alt.), 831 Broadway, Camden, N. J. Architect, Thos. Stephen, Camden, N. J. Owner, Frederick Gereke, Camden, N. J. Brick, 1 story, general interior alterations, brick work, mill work. Contract awarded to Harry Foulkes, Camden, N. J.

Fire House (add.), Camden, N. J. \$1,600. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick and frame, 1 story, 50x25 feet, corrugated iron roof, concrete floors, electric lighting. Contract awarded to J. S. Rogers Co., Moorestown, N. J.

DELAWARE

Construction News

Dry House, Wilmington, Del. Architect, R. C. Tindall, Wilmington, Del. Owners, American Vulcanized Fibre Co., Wilmington, Del.

Brick and concrete, 1 story, 119x59 feet. Architect has received bids.

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Eighth and Tattall streets, Wilmington, Del. Architects, Brown and Whiteside, Dupont Building, Wilmington, Del. Owners, Turner & Stelle, Wilmington, Del. Brick, 3 stories, 20x70 feet, slag roof, vapor heating, electric lighting, wood floors (heating, lighting and plumbing reserved). Lowest bidders, A. S. Reed & Bro., Wilmington, Del.

Radio Station, Fort Dupont, Delaware City, Del. Architect, F. S. Warner, U. S. Eng., Wilmington, Del. Owners, U. S. Government, care of Lt. Col. M. Brooks, Wilmington, Del. Stucco, 1 story, 16x22 feet, Johns Manville roof, pine floors, electric lighting and fixtures, hollow tile. Owners taking bids, due April 5th at 11 A. M. Barclay White & Co., 1713 Sanson street, Philadelphia, is figuring.

Cow and Horse Stable, rear of Pennsylvania avenue and Rising Sun Lane, Wilmington, Del. Architect, Leon W. Crawford, Odd Fellows'

Building, Wilmington, Del. Owner, Wm. Winder Laird, Esq., Wilmington, Del. Brick and hollow tile, 2 stories, 52x28 feet, shingle roof, concrete floors, roof ventilators. Contract awarded to J. E. Healy & Son, Wilmington, Del.

Residences (90), Dormitory and Boarding House, Claymont, Del. Architect, private plans. Owners, General Chemical Co., Claymont, Del. Brick, hollow tile and stucco, 2 stories, various sizes, slate roof, pine floors, steam and hot air heating, electric lighting. Contract awarded to Stewart Walla Co., Holly Oak, Del.

Engine House (add.), Wilmington, Del. Architect, private plans. Owners, Wilmington Gas Co., Wilmington, Del. Brick and concrete, 1 story, 28x42 feet, slag roof, concrete floors. Contract awarded to J. A. Bader Co., Lackey Building, Wilmington, Del.

Miscellaneous Construction News

School, Keyser, W. Va. Architect, Paul A. Davis, 3rd, 1713 Sanson street, Philadelphia. Owners, University of West Virginia, care of State Board of Control, E. B. Stephenson, chairman, Charleston, W. Va. Brick, terra cotta, stone and steel, 2 stories, 157x73 feet, slate and slag roof, steam heating, electric lighting, tile work, rolled steel skylights, cement and oak floors, metal lath, roof ventilators, metal ceilings, dampproofing, wire work, ornamental iron work. Owners taking bids, due April 10th. Roydhouse-Arey Co., 112 N. Broad street, Philadelphia, additional bidders.

Treasury Annex, Madison Place and Pennsylvania avenue, Washington, D. C., \$1,250,000. Architect, Cass Gilbert, 244 Madison avenue, New York City. Owners, U. S. Government, care of James A. Wetmore, Washington, D. C. Brick, terra cotta, reinforced concrete, marble, stone and granite, 6 stories, basement and sub-

basement, 187x111 feet, tile and copper roof, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash, hollow metal skylights and doors, cement floors, metal lath, 3 passenger and 1 freight elevator, safety treads, metal window guards, metal ceilings, waterproofing, wire work, ornamental iron work. Owners taking bids, due April 10th at 3 P. M. Irwin & Leighton, 126 North Twelfth street, Philadelphia, are figuring.

Sub-Station "B" No. 2828 and Frequency Changer House, Navy Department, Washington, D. C. Architect, private plans. Owners, U. S. Government, C. W. Parks, chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick and steel, 34 feet high, 58x142 feet, asbestos protected metal roof, concrete and pine floors, steam heating, electric lighting, iron stairs, ornamental iron work. Lowest bid submitted by Dawson Const. Co., Pittsburgh, Pa., \$51,170.

nues, \$40,000. C. H. Wheeler Co. (O), as above. Wm. Steele Sons Co. (C), 30 South Fifteenth street. Brick and stone, 2 stories, 57x104 feet, slag roof.

Garage, Forty-ninth and Aspen streets, N. W. Cor., \$7,000. J. Krouse (O), as above. Max Chipin (C), 215 North Franklin street. One story, 37x150 feet, brick, slag roof, stone foundation.

Coal Pocket, Nixon and Fountain streets, \$5,000. Brown Const. (O and C), 4600 Main street. Stone and cement foundations, 26x146 feet.

Storage Shed, Rear of 5154 Lancaster avenue, \$300. Bell Telephone Co. (O), 1230 Arch street. E. R. Hall (C), 34 South Seventeenth street. Galvanized iron shed, 15x17 feet.

Store and Dwelling, Twelfth and Morris streets, \$300. Wm. Raich (O), Twelfth and Morris streets. P. B. Toms (C), 1912 South Thirteenth street. Alterations.

Dwellings (11), Seventieth and Kingsessing avenue, \$27,500. Rose Salasin (O), 2011 South Thirteenth street. S. H. Levin (C), 2038 South Sixty-fifth street. Brick, 2 stories, 16x32 feet, slag roof, hot air heating.

Garage, Fairmount avenue and Percy street, \$10,000. Percy Garage (O), as above. A. R. Ray (C), 1635 Thompson street. Brick, steel sash, 1 story, 40x98 feet, slag roof.

Dwellings (8), Regent and Sixty-fifth streets, \$24,000. H. E. Kottman (O and C), 2434 West Clearfield street. Brick, 2 stories, 15x26 feet, slag roof, hot air heating.

Garage, 5403 North Sixth street (rear), \$450. Mr. Senardz (O), as above. W. A. Cloak (C), 2028 East Orleans street. Brick, 1 story, 12x19 feet, slag roof.

Ice Storage, Sedgely avenue and Dauphin streets, \$1,000. American Ice Co. (O), Sixth and Arch streets. J. H. Foster (C), 26 Madison avenue. Brick, 1 story, 36x33 feet, slag roof.

Dwellings (28), Hutchinson and Courtland streets, \$71,000. Daniel Crawford, Jr. (O and C), 701 North Sixty-third street. Stone and brick, 2 stories, 15x300 feet, slag roof, hot water heating, stone foundation.

Dwelling (1), Fairhill street and Cheltenham avenue, \$8,000. C. E. Lloyd, Jr. (O and C), Oak Lane. Stone and tile, 3 stories, 26x37 feet, slag roof, hot water heating, stone foundation.

Dwellings (3), S. E. Cor. Eighty-fourth and Albertson avenue, \$5,400. Golda Kleiman (O); Eighth-fourth and Gibson, N. E. Cor. M. Kleiman (C), Eighty-fourth and Gibson, N. E. Cor. Brick, 2 stories, 14x24 feet, slag roof, hot water heating, stone foundation.

Alterations and Additions

Store, 318 South Front street, \$960. E. H. Melvin, 304 South Front street. W. D. Prouse (C), Drexel Hill, Pa. Fire repair.

Dwellings, 23-10 Grays Ferry Road, \$1,450. S. Peterlitz (O), as above. M. S. Kirschner, (C), 421 Snyder avenue. Alterations and brick addition, 1 story, 18x18 feet.

Factory, Howard & Palmer streets, \$1,800. Martin Stotz (O), Land Title Building. Harry Knehlmeier, 2046 Trenton avenue. Fire repair.

Dwelling, 902 South Forty-ninth street, \$1,500. A. M. Pardee (O), 901 South Forty-ninth street. A. J. Boylan (C), 5955 Spruce street. Alterations, cut window in second story and iron stairway, change heating system.

Garage, 3824-26-28 Terrace street, \$600. Lord Bros. (O), 3830 Terrace street. H. C.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling (1), Ninetieth and Layrock, \$1,500. Edwin Theinrick (O and C), as above. Concrete, 1 story and basement, 15x30 feet, slag roof.

Lunch and Washhouse and Machine and Blacksmith Shop, Richmond and Kennedy streets, \$10,700. Chas. Lennig & Co. (O and C), as above. Concrete foundation, hollow tile

walls, slag roofs, 1 story, 60x70 feet and 1 story, 27x55 feet.

Dwellings (2), Bingham and St. Vincent, \$4,800. H. J. Klumpers (O), 220 East Westmoreland street. H. W. Myers (C), 5814 G street. Frame, 2½ story, 24x35 feet, tile roof, hot water heating.

Machine Shop, Lehigh and Sedgely ave-

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

Missimer (C), 8115 Ridge avenue. Fire repairs.

Show Room, 2129 South Eleventh street, #400. J. J. King (O), as above. J. R. Wielea (C), 1917 Erie avenue. Brick, 1 story, 17x10 feet, slag roof.

Store and Dwelling, Ninth and Morris streets, #1,500. Frank Gurak (O), as above. J. Shenkman (C), 233 Duncannon avenue. Brick, 2 stories, 9x16 feet, and alterations.

Boiler House, Nixon and Umbria streets, #2,500. Wabash Mills Co. (O), as above. E. L. Cuthbertson (C), 334 Roxborough. Brick, 1 story, 24x44 feet, slag roof.

Store and Dwelling, 2106 South street, #500. Mr. Hinkle (O), Philadelphia. S. Cridland (C), 1633 North Camac street. Repair fire damage.

Support For Water Tank, Twenty-sixth and Forty-fifth avenues, #750. Pennsylvania R. R. Co. (O and C), Broad Street Station. Concrete and lumber and steel ties for 50,000 gallon tank.

Dwelling, 218 East Haines street, #400. M. Viscardi (O), 367 East Rittenhouse street. John Cassalla (C), 314 East Haines street. Lower floor and flush bulk.

Dwelling, 728 West Erie avenue, #350. Mrs. P. E. Blewitt (O), as above. R. K. Hutty (C), 3541 North Fifth street. Brick, 1 story, 11x10 feet.

Hospital, 1743 North Fourth street, #4,500. John B. Stetson Co. (O and C), Fifth and Montgomery avenue. Alterations to second floor, cement floor, plastering, steam heat, electric lighting and plumbing.

Garage, Sixty-second and Locust streets, #3,500. J. P. Clari (O), 266 South Sixtieth street. John P. Fallon, 449 South Sixtieth street. Brick, 2 stories, 18x56 feet, slag roof.

Main Office, Twenty-ninth and Gray's Ferry Road, #900. Henry Bower Chemical Manufacturing Co. (O and C), on premises. Brick, 2 stories, 16x18 feet, slag roof.

Factory, Lena and Potterton Place, #400. Woods & Logan (O), on premises. R. M. Peterson & Son (C), 3106 Germantown avenue. Iron replace wood beams for tank support.

Work Shop, 200 West Ashdale avenue, #800. Sam Seymour (O), 3402 West Lee street. J. M. Mortimer (C), 3024 E street. Brick, 1 story, 16x20 feet, slag roof.

Factory, Tulip and Bleigh street, #6,000. L. H. Gilmer Co. (O), Tacony, Philadelphia. Harry C. Eisenbise (C), 1303 Pennsylvania Building. Brick, 1 story, 42x161 feet, slag roof.

Boiler Shop, Edgemont and Tioga streets, #5,000. Quaker City Iron Works (O and C), on premises. Brick, reinforced concrete, 1 story, 40x115 feet, 96x77 feet, slag roof.

Factory, 934-42 North Third street, #700. M. M. Shapiro (O), on premises. Joseph Levin Co. (C), 1530 South Sixth street. Alterations.

Dwelling, 433-35-37 Tree street, #750. Louis Hoffman (O), on premises. George W. Sutton (C), 1940 Gerrit street. Brick, 1 story, 10x12 feet, slag roof.

Store and Dwelling, 1509-11 Germantown avenue, #1,125. Harry Kutz (O), 1531 Germantown avenue. J. Levin Co. (C), 1530 S. Sixth street. Alterations.

Factory, 1512-14 Mascher street, #1,120. A. H. Williams (O), 322 Walnut street. M. Zussman (C), 991 North Marshall street. New floors and general repairs.

Dwelling, 870-72 North Markoe street, #800. Abraham Stone (O), on premises. James C. Jones (C), 4720 Fairmount avenue. Brick, 1 story, 11x14 feet, slag roof.

Dwelling, Sixteenth and Wallace streets, #1,800. Dorothy Weigh (O), 559 North Fifteenth street. W. W. Van Dyke (C), 2842 N. Twenty-sixth street. Installing partition and new bath room.

Store, 5153 Haverford avenue, #300. R. E. Pride (O), 1802 Jackson street. U. S. Hunsberger (C), 735 Cherry street. Alterations to front, tile floor.

Garage, 1743 Foulkrod street, #1,000. G. Gertry (O and C), 1744 Foulkrod street. Brick, 1 story, 12x44 feet, slag roof.

Store, 35 North Ninth street, #500. F. Heardart (O), 210 South Tenth street. Harry R. Rust (C), 19 South Eighth street. Alterations.

Store and Dwelling, 2904 North Front street, #310. John D'Amore (O), on premises. Albert Schmitt (C), 2449 North Hancock street. Flush bulk and alterations.

Brass Foundry, Boston avenue and Thompson street, #3,000. Wm. Cramp & Sons Ship and Engine Building Co. (O and C), Philadelphia. Brick, 1 story, 76x28 feet, slag roof.

Store and Dwelling, 2003 North Thirty-first street, #800. Harry Swartz (O), 2001 North Thirty-first street. J. Levy (C), 1404 South Sixth street. Alterations.

Store and Dwelling, Eighty-fourth and Albertson avenue, #1,000. Golda Kleiman (O), Eighty-fourth and Gibson, northeast corner. M. Kleiman (C), Eighty-fourth and Gibson, northeast corner. Brick, 1 story, 15x12 feet, and second story addition, 15x36 feet, slag roof and alterations.

Store and Dwelling, Ninth and Wharton streets, #2,350. Frank Montone (O), on premises. Nicola D'Amico (C), 1622 South Eighth street. Brick, 2 stories, 16x16 feet, slag roof and stone foundation and alterations.

Office Building, 1512 Walnut street, #30,000. Building Realty Co. (O), 1425 Chestnut street. A. R. Raff (C), 1633-35 Thompson street. Brick, 5 stories, 24x52 feet, slag roof and interior and exterior alterations.

Storage Building, 1041 Buttonwood street, #500. F. Hughes Co. (O and C), on premises. Brick, 2 stories, 16x27 feet, slag roof.

Apartments, 2011 Chestnut street, #2,000. J. Shoemaker (O), on premises. S. L. Godet (C), 1110 North Fortieth street. Vapor heating system.

Garage, 3628 Haverford avenue, #2,000. J. Kresserman (O), 3628 Brandywine street. S. L. Godet (C), 1110 North Fortieth street. Installing steam heating system.

Garage, 212 Queen street, #1,000. St. Philip De Neri Church (O), Second and Queen streets. A. Donaldson (C), 2238 Oakford street. Replace frame wall with brick.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggo give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

To be poor in a wealthy country, to be sick in a good climate, to be inefficient among a progressive people, is a sign of unwise educational methods. Such people were not taught to battle with the world or meet life's emergencies.—Thoreau.

WIDESPREAD USE OF REINFORCED CONCRETE IN CONSTRUCTION.

By J. P. H. Perry, of the Turner Construction Company.

(Address on reinforced concrete construction under the auspices of the National Fire Protection Association at the Complete Building Exposition.)

Nearly every one knows what concrete is. Many know that reinforced concrete is a combination of steel and concrete which makes possible the use of concrete as a structural material. Fifteen years ago reinforced concrete buildings, bridges, dams, floors, walls, culverts, sewers, etc., were commercially unknown, but to-day reinforced concrete is an accepted material of construction with recognized merit and is provided for in practically all engineering and architectural specifications and plans and text-books. It has found its place in nearly all city building ordinances, Government specifications and State requirements.

The general public, however, has not as yet come to appreciate that reinforced concrete may be regarded from the same point of view that structural steel is considered: Structural steel or structural concrete, within certain limits, the two terms and the two materials are interchangeable and equally acceptable; structural concrete usually being the cheaper of the two.

The great office, loft, hotel and apartment house buildings of the larger American cities, except in rare instances, must be built of structural steel, because of the dead weight of structural concrete, but on the other hand practically all industrial buildings, factories, warehouses, cold storage plants, machine shops, etc., are now being built of reinforced concrete and the predominance of this material increases year by year. There is an intermediate field, where, depending upon local conditions, structural concrete and structural steel compete on more or less equal footing.

The reason for the widespread usage of reinforced concrete or structural concrete is no more difficult to find than the underlying causes of the tremendous expansion and growth of the automobile industry, or of the electrical industry, or the moving picture business, or the talking machine business. Sheer merit consisting largely of strength, rigidity, cleanliness, economy and, above all, fireproofness, has established concrete in the favor of the building world, and very largely so in the public's mind as well.

(Continued Next Week)

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

A NOTEWORTHY HOUSING DEVELOPMENT IN PHILADELPHIA

Work of the Octavia Hill Association

The Octavia Hill Association, since the date of its incorporation in 1896, has been engaged in the work of purchasing and restoring old, rundown, and insanitary dwellings in the poorer sections of Philadelphia. Its experience demonstrated the great difficulty of maintaining this class of properties and of paying a net return of 4 per cent. on the investment. The Octavia Hill Association, through its contact with the workman of the lower-paid group, realized the difficulty of the man who could not pay more than \$12 or \$13 per month rental in securing a sanitary house amid respectable surroundings, with the possibility of his own yard and a place for the children to play. The commercial builder, because of the small profit, had ceased to build this type of house, and there remained nothing but the older houses, which were little adapted, either in sanitary or neighborhood conditions, to meet his need. An efficient workman cannot come from homes of this kind, and these days of great stress and strain demand strong bodies. The Octavia Hill Association undertook to meet the need of this group of people, and decided to erect houses renting from \$8.50 to \$13.50 per month.

At the time these houses were erected, it was also thought that this operation might be a demonstration as to how other cities could house their less skillful workmen in a sanitary way and still pay a fair return on the money invested. When these houses were planned, there was not the widespread interest in workmen's houses which exists to-day. The manufacturer has only recently begun to realize the connection between an efficient workman and a good home; and a study of this work of the Octavia Hill Association might bring some suggestions to the owners and managers of the large industries who employ many men of the less skilled group.

As a chain is only as strong as its weakest link, so, too, our standards of living are only as high as those of our less fortunate citizens. We cannot expect to have good citizens where families are surrounded on every hand by evidences of filth and decay, and where immorality and crime run rampant.

After careful search, a piece of land 165x212 feet was purchased in a district near many large manufacturing plants. The plans were prepared by John Irwin Bright, an architect of Philadelphia, Pa. The houses consist of three types, and are arranged on three sides of a large open court, which is used as a playground by the children of the families living in the houses. The one-family houses, of which there are sixteen, contain five rooms and bath.

The entrance to the house is through a hall, so that the front room is entirely separated and can be used by larger families as a sleeping room. The kitchen is equipped with a dresser, or dish-closet, a sink and laundry tub, and a coal range. The plumbing is arranged with hot and cold water service to the kitchen sink and laundry tub, and to the bath room. The house is heated by a furnace with connections to each room.

All rooms are well lighted, and there is ample ventilation. These houses rent for \$13.50 per month. The two-family houses, of which there are two classes, consist of twelve houses with three rooms and bath per apartment, and four houses of two rooms, bath and kitchenette in each apartment. The first group rent for \$10.50 per apartment, and the second group for \$8.50 per apartment. Each kitchen has a coal range, dresser, sink, and laundry tub. The cellars are cemented and are divided so that each tenant has a portion of the cellar separate from the others.

Most of the men of these families are employed in manufacturing concerns in the neighborhood—some are in the textile industries, some are employed on coal barges which are loaded nearby, one being a trolleyman. In several cases it was necessary for both husband and wife to work; one tenant was a widow with her family, the mother working and the oldest daughter taking care of the home. In every instance, however, is a family enjoying all the benefits of a low rental having the conveniences of a modern home, and the advantages of well-lighted and ventilated rooms. In addition to the large playground in the center of the group, each house has its individual drying yard, and these small yards are enclosed with low, open, iron fences.

The tenants have been encouraged to plant flowers and grass, and vie with one another to make their yards the best. Indeed, a tenant who would not have an interest in the small garden plot would be considered undesirable. These dwellings have always been popular, and, excepting between time of out-going and incoming tenants, there are never any vacancies. At one end of the property, a driveway has been arranged, so that all goods, coal, etc., can be delivered at the rear of the houses. The ashes and garbage, instead of being collected at the front, as is common in Philadelphia, are collected from the rear of the houses.

The construction was carried on under the direction of the Superintendent of the Octavia Hill Association; part of the work was done by men directly employed by the Association,

the other part being sub-let as was best. The houses are built of common hard brick, with wide mortar joints. There are cement walks at the front and back. The interior woodwork is stained and varnished, and the walls are painted. The work was done for slightly less than 10 cents per cubic foot. The entire cost of the operation, including the lot at \$10,300, was \$63,350.

To carry out the enterprise, a separate corporation was formed under the name of the Philadelphia Model Homes Company. The stock, amounting to \$20,000, is held by the Octavia Hill Association, and the balance of the amount needed was raised by first mortgage loans at 4.4 per cent secured by mortgages on the houses. The first year showed a return on the investment of the Octavia Hill Association of 7 per cent. after deducting 2 per cent. for depreciation.

While this plan does not offer a solution of all the housing problems of to-day, it is believed it offers a definite and concrete example of what might be done, with such changes as would best adapt it to the needs of many communities.—Frederick C. Feld, in "Journal of the American Institute of Architects."

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

Advertising is nothing more nor less than good salesmanship reduced to print. The business man who can put "sales talk" into type has learned the cardinal principle of good advertising.

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PHILADELPHIA



126th Annual Statement

December 31, 1917

Cash Capital	\$ 4,000,000.00
Reserve for Premiums	10,630,740.40
Reserve for Losses	4,419,000.00
Reserve for Taxes	950,000.00
Reserve for Sundries	160,000.00
Surplus	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	\$ 12,317,502.26
Losses Paid Since Organization	192,518,273.33

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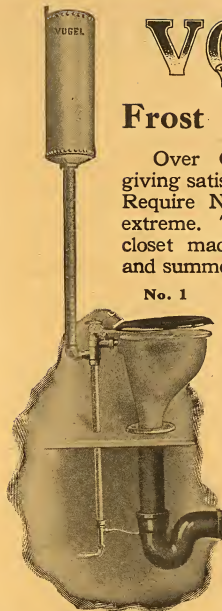
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PHILADELPHIA



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Vol. XXXIII., No. 15
April 10, 1918

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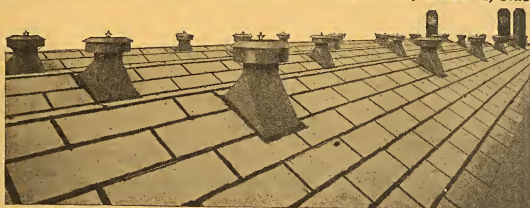


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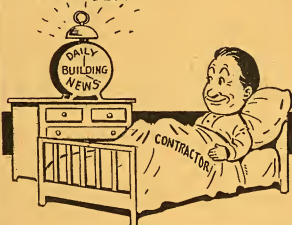
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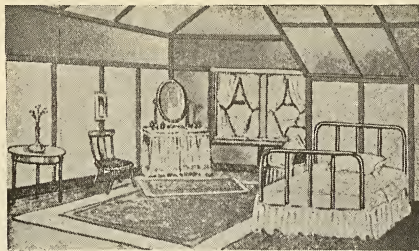
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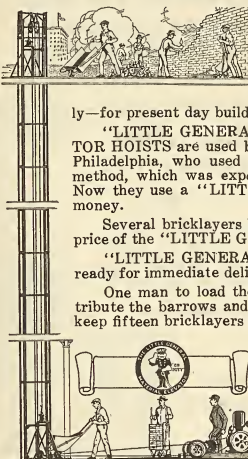
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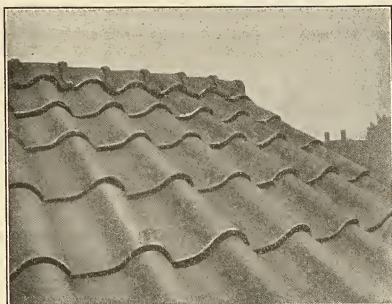
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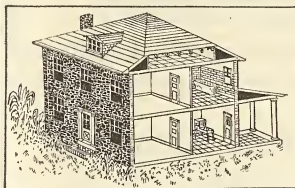
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VOLUME XXXIII
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April 10, 1918

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As The Editor Sees It



SINCE the beginning of the war two words have been daily increasing in importance, until they have finally become potent factors in world progress of the present and of the future. The words "efficiency" and "preparedness."

Efficiency, being the need of the hour, is clamorously sought after and emphasized in every part of the economic and industrial structure. Through the clamor for efficiency there is dawning on the American people the realization that efficiency can best be obtained by looking ahead and preparing for the future. It were useless now to speculate as to what degree of efficiency we might have attained in this present crisis had we been schooled in preparedness.

We have already discussed the housing problems and its relation to efficiency, which is of such absorbing interest at the present time, and this leads us to consider the still broader question of City Planning. The war shows us that not only houses, but cities must be planned in a convenient healthful and business-like way. Since the beginning of the war France and England have made great strides in city planning, and their experience will be a valuable lesson to America in solving this problem.

In order to impress America with the importance of this question and to create public demand for the preparation of far-seeing and scientific plans for city development, a City Planning Exhibition

has been prepared at great expense and labor by the Committee on Town Planning of the American Institute of Architects.

It fulfills every need with respect to the graphic, striking and comprehensive presentation of city planning principles and accomplishments.

The exhibition emphasizes the practical aspects of city planning. It will show by contrast how your city compares with other cities of the same size the world over, with respect to city planning.

The exhibition emphasizes all of the vital elements of the city plan, and can be used to support, by way of example, any project which the city is endeavoring to realize with the backing of intelligent public opinion.

FACTS IN REGARD TO THE CITY PLANNING EXHIBITION.

Eighty cities represented, including a limited number of the chief centers of population in England, France, Germany and other foreign countries.

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out regard to alphabetical order, each group to emphasize a special phase of city planning, such as street systems rail and water terminals, waterfront improvements, recreational systems, civic art and architecture, et cetera.

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PHASES OF CITY PLANNING COVERED BY THE EXHIBITION.

Streets.—Widening, extension, encroachments.

Transportation of People.—Transit systems, co-ordination of railway terminals for passengers.

Transportation of Goods.—Freight terminals and their unification.

Waterfront Development.—For industrial, commercial and recreational uses.

Industrial Districts.

Provision for Food Distribution.—Markets and terminals.

Sanitary Systems.

Housing.—In old districts and in suburban areas.

Recreation.—Playgrounds, parks, boulevards and street planting.

Architecture.—Civic centers, street furnishings and civic art in general.

Districting or Zoning.

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City Planning, which stands for development along scientific lines with efficiency as its ultimate aim, does not ap-

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ply simply to the large city, but to the smaller towns with populations of one hundred thousand and under, always with a view to their future growth and development. A. Pearson Hoover, consulting engineer, gives us some excellent reasons for "small city" planning in *Architecture and Building*. He says:

"Small cities have a distinct advantage over larger cities in city planning, for they can take the experience and mistakes of the large municipalities as their example for future development. In order to comprehend fully the vital need of comprehensive planning for small municipalities one has but to examine the enormous expenditures made by large cities to rectify existing conditions.

"The small firm, which has carefully considered and laid out plans for future development, observes a steady and healthy growth with the smallest possible outlay of capital. On the other hand, the small concern which makes additions indiscriminately and without any thought of future development, soon realizes the enormous expenditures necessary to increase its production on efficient lines and is brought face to face with the fact that it cannot compete with its neighbor except by making an enormous additional outlay of money. One who realizes the future possibilities of his enterprise and plans for the time to come soon becomes an element of force in the community.

"In arrangement of streets the small city can be guided by the lessons learned by larger cities. Here again should the importance of comprehensive planning be felt by the small cities. The street system of every municipality is directly related to topographical conditions as well as to the intensified use of certain sections. Certain streets should always perform and serve a distinct function in respect to traffic, if the development and improvements upon the land are followed out upon a comprehensive plan for the future. The value of a street system depends in a certain measure upon the extent of its diagonal highways and major thoroughfares, and the value of any diagonal highway or main thoroughfare depends upon the connections served to different sections. The small city should feel the importance of providing means for the widening of certain streets to meet future requirements. This can be accomplished at the time when improvements have not yet become intensified by making provision for the ultimate widening of such streets to provide for the traffic which they shall be called upon to handle, when the city has increased to a certain population and covers a contemplated area.

"In the planning of small cities one important question to be studied in the

light of present needs and future growth and possibilities, is the transit problem. Mistakes made in the larger cities by permitting transit facilities to develop indiscriminately so as to feed and tap certain localities, have been a source of great annoyance to the community. To rectify such mistakes the expenditure of huge sums of money has been necessary. If one would look at any of the problems now being presented to some of the larger cities and compare the amount of money necessary to facilitate the movement of traffic from one section to another, he would realize to the fullest extent what proper planning, undertaken in the past, would have accomplished in that municipality. To utilize the best facilities for transportation in the small city is to plan and lay out for the future growth.

"The small city should lay out on a comprehensive plan all the transit facilities that will be required to meet demands far in the future, based upon past record of growth. To be able to transport workmen or mechanics quickly to and from work is of vital importance in the development of any community. In all cities thought should be given to the possibility of future need for elevated systems or subways and in connection with such rapid transit facilities consideration should be given not only to the location of stations, but to the intersection of streets where it is likely that subways will be required, so that curves may be located from cross street to the main avenues without the demolishing of buildings or the heavy expense of underpinning large superstructures.

"In the planning of small cities the question of the elimination of grade crossings arises. It is well known that in several communities the cost of eliminating grade crossings under present conditions, amounts to considerably more money than if this problem had been studied in the past with an eye to future growth. In this problem alone the small city is in a more advantageous position relative to city planning than is the larger one whose development has been allowed to continue without any comprehensive plan.

"One of the most important subjects in the development of small cities is the vital question of districting. To be able to district means the ability to set aside certain sections for certain usages. The districting of certain sections of the small city for future growth and development means that the small town will automatically assume the shape of an economic and efficient municipality. In the large cities where indiscriminate use of certain sections has been made and certain improvements have been permitted to scatter over large areas, this prob-

lem becomes a difficult one. There are certain sections for special lines of industries. There are certain other sections which should be set aside for residential districts. These sections in the small town are almost uniformly spotted with industries and it is when the city takes on the shape of a growing municipality that the vital need of districting becomes apparent. Districting means the healthy development of the whole community on broad lines and on an economic basis. It means the stabilizing of real estate values. It means the producing of the best the community affords relative to its natural resources and geographical location. The most efficient method of correcting evils is to anticipate and prevent them. The time to district a large city was while it was yet small.

"The vital importance of city planning for small cities is no better exemplified than in the need of playgrounds and recreation centers for future development. When it is realized that in large cities all over the country this need for breathing spaces has become increasingly larger and when consideration is given to the cost entailed to obtain such areas, there should be no doubt in any one's mind that comprehensive survey in the past, setting aside such spaces as are required for recreation centers, would be the means for saving thousands of dollars to the community.

A small city depends for its development greatly upon its industrial progress. Without industrial progress and industrial development a municipality will cease to expand. To be able to operate industries efficiently and to be able to produce commodities cheaply depends upon the efficiency of the collective whole and not upon the individual firm. It is through the industrial section that the community receives benefit and this benefit is reflected in the homes, the government and the management of the municipality. It is true that individual firms are more or less independent of one another, but the success and healthy development of the community as a whole depends upon the efficiency of its industrial section.

"Without industrial efficiency municipal expansion cannot obtain. The question resolves itself into the vital need together with city planning, of an industrial survey. An industrial survey means that a comprehensive plan and study is made of the resources of the industrial community. These resources are tabulated and analyzed and upon the results, recommendations are made for the rectifying of present mistakes and suggestions for economic future growth. An industrial survey means an inventory of the industrial section. It means the study of the different elements en-

tering into the industrial community, to be able to plan a healthy growth for the future. It denotes the same for an industrial community as does the taking of stock in and the laying out on efficiency lines of the different departments in a large industrial plant. It means to so regulate and so locate the different industries in the section that each shall receive the services required with the services that can be offered.

"The industrial survey places economy and efficiency in operation above all else. It emphasizes the need of co-ordinating transit facilities, industrial locations and development of the natural resources near or adjacent to the municipality, to bring about efficiency in production and efficiency in management. Lack of appreciation of the advantages of the natural resources of any municipality can only hamper the normal and healthy development of industrialism. Industrialism can reach its highest development only when equal opportunity is secured to all and when reward is equitably proportioned to services rendered. It can reach its highest development only when appreciation is thoroughly sensed of the vital importance for an industrial survey as a means of bringing out clearly the production on economic lines of raw materials near at hand. One has but to look at the record of large cities in the past to find the enormous decrease in the number of establishments within the city and the corresponding increases in the number of establishments outside of the city. It is due to the lack of appreciation of the vital necessities of an industrial survey that such a condition exists. It was the appreciation of the need of an industrial survey and the co-ordination of all industrial forces to one known need,—namely, efficiency and economy of operation,—that has been the dominant factor in the ability of the German nation to stand firm so long as it has. It has not been for any other reason but that economical and efficient operation of industries and a thorough realization of the absolute necessity for industrial preparedness was behind the German war machine.

"Briefly, the industrial survey would in general cover the following subjects:

"An analysis of the present transportation facilities showing their advantages, needs and future expansion.

"An analysis of the transportation charges and plan for readjustment so as to increase more effectively the interchange of commodities.

"Study of the position of the municipality with respect to other commercial centers of the country.

"Study of the position of the muni-

cipality as a center for certain types of industries with analyses showing why and how certain industries should be developed.

"Study of the relation of the municipality in regard to the development of any distinct line of transportation.

"An analysis of the industrial section, with plans for present improvement together with suggestions for future development.

"An analysis of the present industries with suggestions for development in the future.

"An analysis of the labor condition in regard to present industries, together with suggestions as to the kind of labor necessary for certain industries which should be developed.

"An analysis of the housing problem in conjunction with the labor question.

"One can fully realize that after such a survey has been carried through and an analysis made, the municipality is then in a position for future development precisely as is a large industrial plant following its inventory and a study of the location of the different departments with a view to present improvement and future betterment. It is certainly true that municipalities in this country, the smaller ones in particular, will be called upon after the war to do their share towards the commerce of the world and especially in regard to the industrial activity of this country. It may be said without fear of contradiction that until a thorough realization is felt in this country of the need for industrial preparedness based upon efficient and economic operation, our position will be one of embarrassment in regard to after-war competition.

"Industrial preparedness means the establishment of such relations between individual and community, between individual and government, as to create the hearty co-operation of all citizens to meet the need of the municipality and the whole country. Such is the object of an Industrial Survey."

* * *

NO better argument in favor of Mr. Hoover's opinion can be advanced than the present plight of New York City. For years, business in New York has been allowed to go on unhampered; no one has had any regard for the rights of his neighbors until finally the inauguration of the "Save New York" movement has become imperative. At the present time the streets around Fifth Avenue, south of 34th street, are so congested that retailers find it impossible to conduct business with profit. This condition has impeded the

growth of this section of the city and greatly impaired property values.

A "Save New York" Committee has been appointed "to preserve the heart of the city of New York from becoming a factory center, but also to try and establish a future manufacturing center with proper buildings with light, air and facilities for the benefit of the manufacturers, the workers and the real estate interests of the entire City of New York."

The Committee has decided upon a model building not more than seven stories in height and built in units of about 200 feet wide and from 300 to 400 feet deep.

It is not difficult to realize how unnecessary this movement would be,—what an enormous amount of money would have been saved, how much more satisfactory the result, had an industrial survey been made in the early period of New York's industrial development.

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Fifty years ago the grocer set out a keg of mackerel and a box of kindling wood, and sat down to wait for customers. Today he carries street-car and newspaper advertising and dresses his windows as smartly as the department store. If it didn't pay he'd still be sitting behind the stove waiting for customers with a mackerel keg out front doing service for a sign.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A carload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

CHARACTER IN CHURCH DESIGN

By George E. McCrea, Architect.

The average American church builder has felt up to the present time that a structure, properly lighted, warmed, ventilated, large enough to house the congregation, and with good acoustic properties was amply suited to the needs of the congregation. However, others have felt that in addition to these bare necessities a church should express in some fitting manner its purpose and character and try to bring home to the congregation a message. In the average church about half the money expended is spent to accomplish this latter purpose. In many cases this additional expenditure has been worse than wasted. Many churches, through the lack of conception of the character to be expressed or through a wrong conception on the part of the designer, have at great cost developed into what, were it not for the cross which surmounts them, might be taken for museums, town halls, theatres, pagan temples or exaggerated bungalows; or, through a more or less correct use of historic ornament are fairly good but absolutely lifeless reproductions of what in other times or in other environments were suitable church buildings.

It is reasonable to suppose that these churches in most cases represent the ideas and ideals of those who controlled their design and erection—that they show the relative importance attached by their builders to the physical and the spiritual in life; that they show whether the wishes of the house-keeper, the sexton, and the window washer dictated their design, or whether their architecture was intended to uplift and exalt the hearts of those who worshipped in them.

The impressive solemnity which characterizes so many of the mediaeval churches in Europe is but the expression of a people who considered their religion the greatest thing in their lives. They usually began by selecting as dominating a site as possible; made the church the central figure and grouped about it the various units necessary for the performance of all parochial functions, each suggesting unmistakably its proper purpose and relations to its neighbors. Surrounding this group was the town with its shops, factories and homes—the church with its massive walls and ample buttresses always dominating, holding high over all, the cross, the symbol of salvation. The church might have been said to be the heart of the living town radiating its benign influence everywhere. It also served to give the poor, the simple, and the lowly a faint foreshadowing of the beauty of their Father's house in the kingdom that is to come. The splendor of the church door proclaimed God's welcome to His children. The magnificence of its interior, its columns, its arches, its vaulted ceilings, its stained glass windows, its sculptures, its harmony of line and color all tended to bring to the mind and heart of the visitors the sense of awe and reverence in God's house; and then as the eye traveled to

the altar (always the most beautiful part of the church), the sheer splendor of it told in thundering tones the whole motive back of everything else—that here is the dwelling place of Christ on earth—here is His home among His children—here is He, day and night, to listen to their petitions and console them in their sorrows.

The ideals of the church are the same today, but the spirit of our church builders is different. The clever real estate man presents a bargain in a lot, and the clergyman, not being too well supplied with funds, is easily convinced of its suitability—usually without any foresight for future needs. The architect is a good talker or a friend of some member of the building committee, and brings forth from his treasury plan No. 23, which has worked well in numerous other places. The contractor, figuring low to underbid competitors, does no more than he has to. The manufacturers of pews, lighting fixtures, etc., have stereotyped patterns which can be indefinitely reproduced at low cost. The stained glass is bought by the yard. The statuary and paintings are usually tawdry and often discarded from other congregations; and the result, instead of teaching the uplifting lesson so well taught by mediaeval churches, simply advertises a lack of good taste.

The usual western American group of church buildings consists of a church which proclaims in an indifferent manner that it is a place where people may be protected from the elements while attending to religious matters, but does not awaken any thought of reverence for the purpose for which it exists—a parochial house which in many cases has to be pointed out to a stranger as such—a makeshift hall of some sort; and a parochial school usually entirely unrelated either in location, style or composition to the rest. The most definite impression one gets is that each is a thing apart, jealous of and trying to extinguish its neighbor.

Most of these architectural night mares have been due to the rapid growth of our communities. Churches of a more or less temporary character have been constructed rapidly and cheaply, with the hope that they would be replaced with more permanent and carefully studied structures in the future. These pioneer days are largely over and we are settling down to a more stable form of life. As court houses, city halls, commercial buildings and dwellings are taking on a more permanent character, it would seem that our churches must follow in their wake—in fact, the churches, wherever possible, ought to be the leaders in this building up of ideals, and so it is to be looked for that the churches to be erected henceforth will begin to take on some of the appearance of the old inspiring structures of the middle ages.

This can be accomplished without the expenditure of vast sums of money. All that is

necessary is to have architects of vision and ideals who can judiciously expend such money as is to be expended in excess of necessary structural costs, to convey through dignified and appropriate architecture the inspiring message of God dwelling in our midst.—"The Architect and Engineer."

A BUNGLE-ODE.

By Ern. Freese.

A bungalow is a species of inhabitable mushroom that springs up over night on vacant lots. It might be more comprehensively defined as the manifestation of a peculiar style of Western domestic architecture that causes lady tourists from the two-storied East to be precipitated into involuntary and rapturous comments, such as "Oh! How cute!"

Architecturally speaking, the bungalow is a composite of Swiss chalet, Japanese tea-house, Frank-Lloyd-Wright leaded glass, Spanish hacienda, Chinese influence, Mission furniture, monstrous originality, disappearing beds, and disillusioning appearance.

What, You are incredulous. Listen, then. Allow me to describe one of these bungalows as I hypothetically view it from where I sit. No, I shall first describe the whole flock.

"Flock" is the proper term. They appear to have just "lit," or as if flight were imminent. That is the first impression; restlessness and impermanency, created by the multiplicity of flattened-out gable roofs and enormous flapping eaves, all abristle with fantastically fashioned rafter ends. However, on further survey, it is realized with a jolt that if the bungalow proper takes to flight, at least a part will remain eternally anchored to earth. I refer to the huge piles of masonry—brick, cobblestones, concrete—that constitute the porch piers. For, behold, even though a bungalow have no foundation upon which to rest other than a two-by-six redwood plank, yet in the porch piers must there be at least ten tons of solid masonry to support the two-by-four raftered roof. Why mention the mysteries of ancient Egypt? Imagine future antiquarians discoursing as follows of the days in which we live:

"Huge piles of masonry still stand upon the sites of those ancient Western cities. The origin and purpose of these great and numerous Cobble-Isks are shrouded in mystery. The only rational theory by which we can account for their existence is that the people of that Peculiar Era did start to build what were then known as Skyscrapers, but that Land Values changed over night and the project was abandoned because there was no Money in it."

One bungalow in particular attracts my attention. The porch piers of this one are of cobblestones. And the cobblestones are studied with brick—for effect. The effect is that you wonder why the contractor neglected to furnish enough cobbles to finish the job. The rivers are full of them—not contractors; cobbles. They are a dominant note in the scenic grandeur of far Western rivers. These rivers are peculiar; they are upside-down most of

the time. That is to say, the water is underneath, the sand and cobbles on top! Hence, it is an easy matter to procure cobbles. You simply drive down the river and pluck them.

Well, as I have said, the porch piers of this particular bungalow are studded with brick—for effect. You have noted the effect—upon me. Wait. There are four of these great piers, all in a row. At the ground line they are perhaps six feet square, and they rise roofward in sweeping curves of the fourth or fifth dimension to the dizzy height of about seven feet. At this point, the sweeping curves have swopt into tangency with the vertical. And here they terminate, two feet square, capped with a chunk of concrete half a foot thick. But the end is not yet. There still intervenes a space of two feet between the top of each pier and the overhead roof-beam. And now—O ye of little understanding—I beseech ye to behold the monstrous originality of the bungalow builders! This intervening space of two feet is occupied by a four-by-four stick of timber that rests in supreme and supercilious stability upon its enormous base of stone. This construction is artistic. What? I repeat—artistic. It is moreover delightfully frank—not Frank-Lloyd-Wright: frank. For it acknowledges the fact that instead of a tonnage of masonry to support that paper roof, all that is actually required is a four-inch stick of Oregon pine!

In the end spaces between these piers are described graceful catenaries. A catenary is no part of cat or canary. It is the curve described by a hanging chain. Perhaps I should have said that between these piers hang chains, describing catenaries. Then describing on my part would have been superfluous. These iron chains are firmly anchored at each end into the eternal masonry of the piers. They replace the antiquated classic balustrade—and they serve a useful purpose (beauty and utility should be co-existent)—they serve as swings for children. Not necessarily the bungalow dwellers' children, but your children, my children, the children of the next-door neighbors, and the children of generations yet unborn. The chains are procured from the manufacturers of harbor dredges and also from the builders of steel derricks.

Farther along on bungalow row is what is technically known as an "aeroplane." This particular aeroplane is a bi-plane—that is to say, it has two sets of white planes—two paper roofs, one above the other. The upper roof hovers over a second floor sleeping apartment. The walls of the sleeping apartment are set back, all around, from the walls of the story beneath. This is an aeroplane of the bungalow army. It is also a highly successful combination of freight train caboose and Japanese pagoda. And the Chinese influence is decidedly marked in the jig-sawed tip-tilted rafter ends. Other influences are also in evidence.

Another bungalow exhibits a melee of original and startling timber work. The startling part of it is that it does not crash to earth of its own weight. Mighty timbers—with ends cut into every conceivable form of

curve known to higher geometry, planing-mill mechanics and jig-saws—are piled up this way and the other ways in a bewildering and spik-ed-together intricacy that causes the beholder to gasp in unbelief. Theoretically, this bewildering intricacy is the "support" of the overhanging roof. Theories are flexible and nebulous things. But the law of gravitation is an undisputed fact. Wherefore, these flapping, wing-like, overhanging eaves of two-by-four rafters sag under the very weight of their aforementioned "supports," and a typical bungaluesque down-drooping roof curve manifests itself just beyond the wall line.

Have patience. Not yet have you learned all the wonders of the bungalow. Enter. Grasp the ponderous store-front handle of that four-by-six-eight slab of solid oak, and come in. Solid oak? Ah—vain and for the nonce are the front doors of the bungalow builders, for the paper veneer on that door is already wrinkling its back where the sun hits it. But come in.

Look out! Don't open the door too wide—'twill crash into the Mission rocker. And if the rocker starts rocking, 'twill smash the leaded glass of the bookcase doors. Now look at the mantelpiece and the beamed ceiling. All of solid mahog—Oh!—one-by-six Oregon pine boards nailed together and stained—stained out of all semblance to Oregon pine boards.

You are curious as to the meaning of that lowered ceiling-beam occurring midway between the front door and the kitchen. Ho! Ho! Surely you are from the far, far East—mayhap from Massachusetts. Listen. That particular beam is the dividing line between this and that, "this" being the living room and "that" being the dining room.

Follow this path into the kitchen. Careful. Don't bump your shins on that seat-end. Oh, I nearly forgot—that built-in seat conceals the head-end of a perambulating bed. The feet-end projects into the bed room closet. The roof of the bed space is the floor of the closet, and the floor of the closet is three steps above the floor of the bed room. If you stand up straight in the closet you bump your head on the ceiling.

Isn't this kitchen a wondrous thing? In comparison, a dining car kitchen becomes a vast and immeasurable space. Stand there by the sink. You can reach everything in the room.

And this is the bed room. Where is the bed? In the wall behind that mirror. Step back into the kitchen and I will let the bed down. There! That's how it works. But now if you insist upon seeing the bath room, I shall have to fold up the bed again or we shall have to crawl over it—we are on the wrong side!

Enough. I would a confession make.

Once upon a time, a very dear friend of mine casually remarked that she would "just love to live in a bungalow." Her casualness was affected. For she thereupon confided to me that she had one "all picked out," and that it was "the dearest thing." She had an acute attack of bungalow-mania. But, as I have

said, she is a very dear friend of mine. Would I go with her and see that bungalow? I would. And I did.

"Isn't it just adorable?" she pleaded.

I repeat, she is a very dear friend of mine. So I didn't kill her outright.

I let her live and suffer.

We rented that bungalow!—Ern. Freese, "The Architect and Engineer."

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Garage, rear of 105 West Upsal street, Germantown. Architect Lawrence Visscher Boyd, Harrison Building, Philadelphia. Owner, Chas. Atherton, on premises. Stone, 1 story, 22x22 feet, slate roof, cement floors, electric lighting. Architect taking bids, due April 13th. Chas. Johnson, 5701 Boyer street; Wm. J. Gruhler & Co., 219 East Hgh street; Wm. C. Wright, 22 Harvey street; Stokes Bros., 6723 Musgrave street, and McClintock & Weaver, 24 Phil-Ellena street, all of Germantown, are figuring.

Residence (alts.) to Apartments, 1742 North Franklin street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Wm. Trautwine, 1328 Chestnut street, Philadelphia. Consists of interior alterations, hot water heating, electric lighting, tile work, yellow pine floors, mill work, plumbing, painting and plastering. Plans in progress. Will take sub-bids in about two weeks.

Residence (alts.) to Apartments, 924 North Forty-first street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Wm. Trautwine, 1328 Chestnut street, Philadelphia. Brick, 3 stories, hot water heating, yellow pine floors, electric lighting, tile work, mill work, plastering and painting, general interior alterations. Plans in progress. Owner will be ready for sub-bids in about two weeks.

Garage, Spec. 2888, League Island, Philadelphia. Architect, private plans. Owner, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards & Docks, Navy Department, Washington, D. C. Brick, steel and reinforced concrete, 1 story, 62x1+2 feet, slag or gypsum roof, concrete floors, steam heating, electric lighting, rolled steel sash, hollow metal doors, hollow tile, safety treads, dampproofing, ornamental iron work (gasoline storage system, reserved). Lowest bids submitted by Monaghan and Losse, Inc., \$31,700, 120 days. Ward-Yardley Co., \$32,200, 150 days. Lam Building Co., \$32,400, 132 days. Wm. Linker Co., \$33,660, 100 days. Hughes-Foulkrod Co., \$33,265, 90 days.

Garage, 229-31 Fitzwater street, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, H. Hurwitz, on premises. Brick, 1 story, 30x136 feet, slag roof (wood truss), cement floor, stone foundations, steam heat, electric light, mill work, hollow metal skylights, flush bulks (gasoline storage system, reserved). Owner taking bids. Jacob Bender, 1817 South Fourth street; Michael S. Kirschner, 421 Snyder avenue, are figuring.

Store and Dwelling (alts.), to Apartments (3), S. E. Cor. Nineteenth and Berks street, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, M. Isen, Eighth and Berks streets, Philadelphia. Consists of general interior remodeling, 3 stories, metal lath, plastering, hardwood floors, tile and marble work, hollow metal skylights, hot water heating, plumbing, iron stairs, ornamental iron work. Owner and architect taking bids, due as soon as possible. Jacob Bender, 1817 South Fourth street; Louis Sverdloff, 228 South Fifty-ninth street, and Nathan Litman, 2030 South Fifth street, are figuring.

School (alts.), Fifty-seventh and Haverford avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Stone, brick and reinforced concrete, 3 stories and basement, composition and slate roof (steam heating, electric lighting, reserved), copper roof, cement, maple and mastic and asphalt floors, hollow tile, metal lath, hollow metal skylights, fire doors, fire escapes, roof ventilators, metal weather strips, metal ceilings, wire work, ornamental iron work. Lowest bid submitted by Standard Const. Co., 1713 Sansom street, \$113,000; second lowest bid by Wm. R. Dougherty, 1610 Sansom street, \$119,000.

Storage Building, N. E. Cor. Tenth and Vine streets, Philadelphia. Architects, Simon & Bassett, 252 South Juniper street, Philadelphia. Owner, Jas. A. Humphreys, 1021 Callowhill street, Philadelphia. Brick, slow burning, 1 story, 60x120 and 19x132 feet, slag roof, electric lighting (heating, reserved). Plans completed. Architects ready for bids.

Baggage Room (alts.), 1004-26 Spring Garden street, Philadelphia. Architect, J. Morris Daniels, 252 South Juniper street, Philadelphia. Owner, Union Transfer Co., Real Estate Trust Building, Philadelphia. New offices, toilets and lockers, steam heating, electric lighting, hollow metal skylights, hemlock, maple and concrete floors, metal lath. Architect will build.

Apartment House (alts.), 1722 Pine street, Philadelphia. Architects, De Armond, Ashmead & Bickley, 1527 Walnut street, Philadelphia. Owner, name withheld. Vapor heating, electric lighting, tile work, slag roof, hardwood floors. Architects ready for sub-bids.

Store Building (alt.), Thirteenth and Rockland streets, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, name withheld. Brick, 2 stories, general interior altera-

tions, mill work, plastering, electric lighting. Plans in progress. Will take bids in a few days.

Garage, Reed and Darien streets, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, Samuel Wilensky, Ninth and Reed streets, Philadelphia. Brick, 1 story, 38x150 feet, slag roof, stone foundations, cement floor, steam heating, electric lighting, hollow metal tile skylights, flush bulk (gasoline storage system, reserved). Owner is taking sub-bids.

Factory (add.), Forty-ninth and Parkside avenue, Philadelphia. Architect, Andrew J. Sauer Co., 908 Chestnut street, Philadelphia. Owners, Cunningham Plano Co., 1101 Chestnut street, Philadelphia. Reinforced concrete and brick, 1 story, 64x78 feet, slag roof, electric lighting, concrete floors, hollow metal skylights, fire doors, waterproofing. Architects taking revised bids. Frank G. Stewart, 1619 Sansom street; Conneen Const. Co., 1737 Filbert street; P. Hallbach Const. Co., Twenty-sixth and Thompson streets, and J. Sims Wilson Co., 1125 Brown street; Doyle & Co., 1019 Sansom street, are figuring.

Garage (alt. and add.) West Philadelphia. Architects, Pilsom and Stanton, 1328 Walnut street, Philadelphia. Owners, name withheld. Brick, 2 stories, 80x80 feet, reinforcing floors, cement work, hot water heating, electric wiring (1) electric elevator. Plans completed. Architects will take bids in a few days.

Bank Building (alts.), 4344 Frankford avenue, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owners, Frankford Trust Co., on premises. Brick, 1 story, 10x20 feet addition, slag roof, mineral composition floor, steam heating and electric lighting extension, plumbing, partitions, iron grills. Architect is taking sub-bids.

Garage, Fifteenth and Columbia avenue, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Brick, 1 story, 23x80 feet, slag roof, stone foundations, cement floors, electric lighting. Plans completed. Architect will take bids in a few days.

Sorting Shop, Tracer and Incendary Composition house, Enkin Street Tunnel, Officers' Quarters and alt. to Hagner Road R. R. siding on decessing. Frankford Arsenal. Architect, private plans. Owners, U. S. Government, care of Col. Geo. Montgomery, Frankford Arsenal. Reinforced concrete, brick, stone and granite, 2½ stories, 110x44 feet, 1 story and basement, 102x40 feet, 2½ stories, 27x54 feet, slate and slag roofs, cement, composition and maple floors, hollow tile, metal lath, elec-

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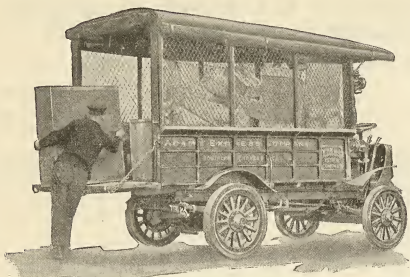
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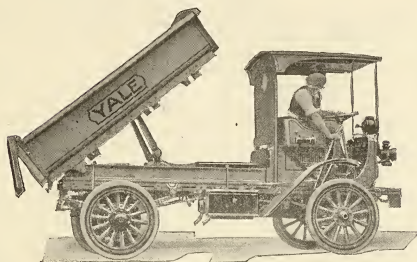
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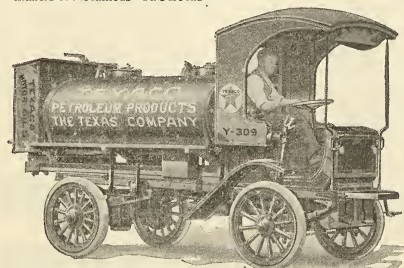
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tric elevators, roof ventilators, vacuum heating, electric lighting, tile and marble work, rolled steel sash, fire doors, kala-meind doors, ornamental iron work, water-proofing, wire work. Lowest bid submitted by Wm. R. Dougherty, 1610 Sansom street, Philadelphia; second lowest by Ketcham & McQuade, 1029 Brown street, Philadelphia.

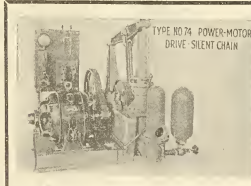
Tenement House (alts.) and Garage, southwest corner of Park and Montgomery avenues. Architect, Wm. H. Wooters, 816 West Allegheny avenue, Philadelphia. Owner's name withheld. Brick, 1 story, slag roof, yellow pine floors, cement work, tile floors, mill work. Architect taking bids, due as soon as possible. H. P. Werner, 3243 Germantown avenue; Jas. Kelly, Bulletin Building; John Schuster, 3532 North Fifteenth street, are figuring.

Houses (907), Camden, N. J. Architect, Electus D. Litchfield, 477 Fifth avenue, New York City. Owners, New York Shipbuilding Co., Camden, N. J. Frame, stucco and brick, 2 stories, various sizes, slag, tin and composition roofs, stone foundations, hot air heating, electric lighting, pine floors. Architect taking bids on 14 types, due April 9th. Henry P. Schneider, 3713 Old York Road, Philadelphia, is figuring.

Store (alts.), 3615 Germantown avenue, Philadelphia. Architect, Wm. H. Wooters, 816 Allegheny avenue, Philadelphia. Owner, C. A. Rowell, 1615 West Allegheny avenue, Philadelphia. Consists of removing stone walls, brick work, concrete footings, yellow pine columns and girders, plastering and painting. Architect taking bids. Thos. C. Trafford, 1613 Sansom street, and Pringle Borthwick, 8018 Germantown avenue, additional bidders.

Office Building (alts.), Germantown Central Office, Germantown. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, The Bell Telephone Co., Seventeenth and Arch streets, Philadelphia. Consists of interior alterations, plastering, painting, mill work, metal lath. Owners taking bids, due April 12th. F. L. Hoover & Sons, 1025 Cherry street, and H. H. Burrell, 206 South Quince street, are figuring.

A hen is the only kind of a critter that can produce something by sitting down and doing nothing.—Exchange.



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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Testing Room (alts.), 1206 Nectarine street, Philadelphia. \$3,000. Architect, private plans. Owner, Tinius Olsen Testing Machine Co., Twelfth and Buttonwood streets. Brick, 2 stories, general interior and exterior alterations to present building, maple floors, rolled steel sash or mill work, hollow metal skylights, slag roof, electric lighting. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Park Entrance, Point Breeze Park, Philadelphia, private plans. Owners, Keystone Realty Co., Land Title Building, Philadelphia. Iron on frame, brick foundations, painting, hardware. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Residence, Cottman and Tabor streets, Philadelphia. \$5,000. Architect, private plans. Owner, Harry Strain, 2813 North Fifth street, Philadelphia. Stone, 2 stories, 26x32 feet, single roof, hardwood floors, stone foundations, hot water heating, combination lighting. Contract awarded to M. Stevens, 910 Fanshaw street, Philadelphia.

Store, 70-72 North Second street, Philadelphia. \$10,000. Architect, private plans. Owner, John Dobson, 809 Christian street, Philadelphia. Consists of fire repairs, interior and exterior alterations, slag roof, pine floors, electric light (heating, reserved). Contract awarded to E. H. Kieer & Son, 1321 kodman street.

Garage (alts.), 1515-21 Brandywine street, Philadelphia. \$2,500. Architect, private plans. Owner, Edith M. Hirlinger, 1514 Green street, Philadelphia. Interior alterations, new walls, 2 stories, 25x56 feet, cement floors. Contract awarded to H. P. Schneider, 3713 Old York Road.

Garage, 1217 Lindley avenue, Philadel-

phia. \$4,500. Architect, private plans. Owner, Bertha G. Modell, on premises Brick, 1 story, 48x54 feet, slag roof, cement floors, stone foundations. Contract awarded to S. F. Reich, 3015 North twenty-fourth street, Philadelphia.

Garage (alt. and add.), 1821-23 Sansom street. \$4,500. Architect, private plans. Owners, De Martely & Co., 1822 Chestnut street, Philadelphia. Brick and stucco, 1 story and basement, 26x80 feet, slag roof, cement floors (heating and lighting, reserved), iron stairs. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street.

Garage and Storehouse, 1624-26 Thompson street. \$2,000. Architect, private plans. Owner, A. Raymond Raff, 1635 Thompson street, Philadelphia. Brick, 1 story, 32x80 feet, slag roof, stone foundations, concrete floors. Contract awarded to A. R. Raff Cont. Co., 1635 Thompson street.

Boiler Room, Seventeenth and Cambria streets, Philadelphia. \$2,000. Architect, C. F. Neff, Otis Building, Philadelphia. Owner, Electric Service & Supply Co., on premises. Reinforced concrete, underground, 20x21 feet, concrete roof and floors. Contract awarded to John N. Gill Co., Otis Building, Philadelphia.

Store Building (alts. and add.), N. E. Cor. Eleventh and Market streets. \$300,000. Architects, Simon & Bassett, 252 South Juniper street, Philadelphia. Owners, Frank & Seder, on premises. Brick, steel and concrete, 5 stories, 60x110 feet, asphalt and slate roof, pine and maple floors, hollow tile, elevators, tie and marble work (lighting and heating, reserved). Contract awarded to Warren-Moore Co., Colonial Trust Building.

Garage (add.), to school, 924 Spring

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street, Philadelphia. \$1,526. Architect, J. Horace Cook, Nineteenth above Chestnut streets. Owner, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Brick, 1 story, 48x14 feet, composition roof, cement floors, concrete foundations, extension to steam heating system, Contract awarded to F. A. Havens & Co., 845 North Nineteenth street.

Factory (add.), Wayne and Windrim avenues, Philadelphia. \$35,000. Architect, private plans. Owners, The Brown

Instrument Co., on premises. Brick, 2 stories, 30x136 feet, and 2x40 feet, general alterations, stone foundations, slag roof, pine floors, electric lighting. Contract awarded to R. C. Ballinger, 218 North Thirteenth street, Philadelphia.

Storage and Crane Runway, 1832-38 North Ninth street. \$10,000. Architect, private plans. Owners, Montgomery Iron & Steel Co., on premises. Iron on iron, 1 story, 100x149 feet, corrugated iron roof. Contract awarded to Samuel Frank, 1832-

38 North Nineteenth street, Philadelphia. Factory, Woodland avenue and Island Road, Philadelphia. \$4,000. Architects, Harris & Richards, Drexel Building, Philadelphia. Owners, Fels & Co., Seventy-third and Woodland avenue, Philadelphia. Brick, 1 story, 98x52 feet, slag roof, cement floors. Owners will build.

School (alts.), S. E. Cor. Palmetta and Bleigh streets. \$871. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owner, Board of Education, Nineteenth above Chestnut streets, Philadelphia. Consists of interior alterations, mill work, etc. Contract awarded to J. H. Jordan, Thirty-first and Oxford streets, Philadelphia.

PENNSYLVANIA

Construction News

Factory (alt. and add.), Reading, Pa. Architect, L. D. Lance, Wyomissing, Reading, Pa. Owner, Reading Knob Works, Reading, Pa. Brick, 1 story, 24x34 feet, slag roof. Plans completed. Owners ready for bids.

Church, Reading, Pa. Architect, Alexander Smith, Reading, Pa. Owner, Perkiomen Avenue Presbyterian Church, Reading, Pa. Stone, 1 story and basement, 50x50 feet, slate roof, pine floors (steam heating and glazing, reserved), electric lighting. Architect taking bids. H. J. Raudenbush, Daniel Hunter, Beard Const. Co. and Chas. Schlegel, all of Reading, Pa., are figuring.

Apartment House (alt. and add.), Fifth and Walnut streets, Reading, Pa. Architect, private plans. Owner, Andrew J. Pink, 658 Penn street, Reading, Pa. Brick, 3 stories, 35x80 feet, slag roof, steam heating, electric lighting, tile and

marble work, hardwood floors. Owner is taking sub-bids.

Restaurant (alts. and add.), Lancaster, Pa. Architect, M. E. Evans, Lancaster, Pa. Owner, Crystal Restaurant, Lancaster, Pa. Brick, 1 story, 65x14 feet, leaded glass, tile work, metal ceilings, plumbing. Plans in progress. Will take bids in a week.

Apartment House (alts.), West King street, Lancaster, Pa. Architect, J. B. Harman, Lancaster, Pa. Owner, D. Ackerman, Lancaster, Pa. Brick, general interior alterations, tile work. Plans completed. Owner taking sub-bids.

Residence, Mount Joy, Pa. Architect, Emilen Urban, Lancaster, Pa. Owner, M. A. Rollman, Mt. Joy, Pa. Stone, 2½ stories, 64x28 feet, slate roof, hardwood floors (heating and lighting reserved), tile and marble work. Architect taking bids. Wm. Flick, Frank Bachman, Lancaster,

Pa.; Jacob Snyder, Florin, Pa.; John Haymaker, Mt. Joy, Pa., and Hoffer Bros., Elizabethtown, Pa., are figuring.

Storage Tanks (5), York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owner, Keystone Roofing & Mfg. Co., York, Pa. Reinforced concrete, 10½ feet high, 15x70 feet. Architects taking bids, due April 9th. Horace Eppley, Spari Bros., Frank Lehman and Wm. Kroft, all of York, Pa., are figuring.

Warehouse (alt. and add.), Huntingdon, Pa. Architects, Chas. Hillman & Son, 400 Chestnut street, Philadelphia. Owners, Chas. Miller & Sons, Huntingdon, Pa. Brick, general interior and exterior alterations, 3 stories, 58x100 feet, electric lighting, rolled steel sash, fire floors. Plans in progress.

Residence (alt. and add.), Devon, Pa. Architect, Wesley Leshner Blithe, 608 Chestnut street, Philadelphia. Owner, Geo. R. Lancaster, 1303 North Broad street, Philadelphia. Stone and rough cast, 2½ stories, 82x50 feet, tin roof, hardwood floors, hot water heating, tile and marble work. Plans in progress.

Stores (5), Third and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson,

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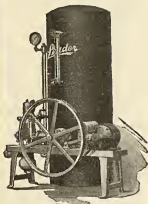


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1208 Chestnut street, Philadelphia. Owners, Penn Realty Co., Chester, Pa. Brick, 1 story, stone foundations, 16x80 feet to 100 feet, slag roof, electric lighting, hollow metal skylights, metal bulks. Plans about completed. Owner will take sub-bids.

Surge's Home, Phillipsburg, Center Co., Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, Phillipsburg Hospital, Cottage State Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, lighting and plumbing, separate bids). Architect taking bids, due April 12th. W. D. Steinbach Sons, Lewistown, Pa., are figuring.

Residence, Waynesboro, Pa. Architect, J. B. Hamme, York, Pa. Owner, R. M. Lehman, Waynesboro, Pa. Brick and stone, 2½ stories, 46x60 feet, slate roof, steam heating, electric

lighting, hardwood floors. Plans in progress.

Residence and Garage, Columbia, Pa., \$8,500. Architect, M. E. Evans, Lancaster, Pa. Owner's name withheld. Brick, 2½ stories, 32x34 feet and 16x20 feet, slate roof, hot water heating, electric lighting, plumbing. Plans in progress.

Store (alts.), East Market street, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owner, D. F. Hirsh, on premises. General interior alterations, 1 story, hardwood floors, electric lighting, marble and tile work, metal ceilings, flush bulks. Architect taking bids. Geo. Gilbert, Samuel P. Glatfelter, and Hess Bros., all of York, Pa., are figuring.

Store (alt. and add.), Second and Walnut streets, Harrisburg, Pa., \$7,500. Architect, Thomas Kelker, Harrisburg, Pa. Owner, John Rose, Second and Walnut streets, Harrisburg, Pa. Brick, new front and general alterations, steam heating, electric lighting, hardwood floors. Plans in progress.

PENNSYLVANIA

Contracts Awarded

Hotel, Fourth and Edgemont streets, Chester, Pa. \$75,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, George Shober, 505 Market street, Chester, Pa. Stone foundations, brick, terra cotta and concrete, 4 stories, 70x80 feet, slag roof, steam heating, combination lighting, tile work, hollow metal skylights, fire tower and doors, yellow pine floors, metal lath, trunk —, roof ventilators, ornamental iron work. Contract awarded to Hogg Const. Co., 1634 Sansom street, Philadelphia.

Bridge No. 57 (Rebuilding), North of Heuvertown on Bethlehem Branch. Engineer, Samuel T. Wagner, Reading Termi-

nal, Philadelphia. Owners, Philadelphia & Reading Railway, Reading Terminal, Philadelphia. Stone and concrete, 26 feet clear span, 15 tracks. Contract awarded to C. P. Bower, Emerald and P. R. R., Philadelphia.

Y. M. C. A., Lewistown, Pa., \$75,000. Architect, John B. Hamme, Wiest Building, York, Pa. Owner, Town of Lewistown, Pa. Brick and stone, 3 stories, 80x120 feet, steam heating, electric lighting, tile work, wood floors, hollow tile, metal lath. Contract awarded to Steinbach Sons, Lewistown, Pa.

The "Builders' Guide" is in its thirty-third year of continuous publication.

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New Jersey Construction News

Bungalow, Stone Harbor, N. J. \$3,500. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owner, Wm. E. Sjostrom, care of Architects. Frame, 1 story, 24x40 feet, shingle roof, pine floors, electric lighting. Architects taking bids. South Jersey Realty Co., Third and Walnut streets, Philadelphia, is figuring.

Warehouse, Trenton, N. J. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Crescent Insulated Tire & Cable Co., Trenton, N. J. Reinforced concrete, 3 stories, 33x103 feet, slag roof, hollow tile, metal lath, elevators, safety treads, waterproofing and damp-proofing, ornamental iron work, rolling steel doors, fire doors, hollow metal skylights, rolled steel sash (heating, plumbing, electric work and elevators, reserved). Architects have received bids.

Slaughter house, Camden, N. J. Architect, private plans. Owners, A. Schlörer & Sons, Eighth and Chestnut streets, Camden, N. J. Brick and concrete, fireproof, 2 stories, 40x45 feet, slag roof, concrete floors, metal lath, elevator, rolled steel sash and skylights (heating and electric work, reserved). Contract awarded to Hensgen Bros., 1140 Mechanic street, Camden, N. J.

Cremaory, Southard street, Trenton, N. J. Architect, A. C. Gregory, City Hall, Trenton, N. J. Owner, City of Trenton, care Leon D. Hirsch, City Clerk, Trenton, N. J. Brick, 2½ stories, 48x50 feet, slag roof, electric lighting. Lowest bid submitted by S. W. Mather & Son, Greenwood and Canal streets, Trenton, N. J.

Hospital and Laundry Building and Boiler House, Trenton, N. J. Architect, Wm. Klennann, Trenton, N. J. Owners, City of Trenton, Department of Public Affairs, care Mayor Donnelly, Trenton, N. J. Brick, one story and two stories, 300x26 feet and 50x86 feet, slate roof, concrete floors, hollow tile, metal lath, elevators, safety treads, steam heating, electric lighting, tile and marble work, iron stairs. Lowest bid on carpentry submitted by Fred Parker, Trenton, N. J. Lowest bid

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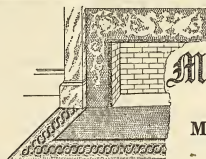
on masonry submitted by Chas. Smith, Trenton, N. J.

Garage, Bathhouse and Amusement Building, Pacific and Mississippi avenues, Atlantic City, N. J. Architect, Seward G. Dobbins, City Square Theatre Building, Atlantic City, N. J. Owners, Herr Corporation, 2515 Boardwalk, Atlantic City, N. J. Concrete, brick, stone and hollow tile, two stories, 38x100 feet and 150x352 feet, slag, terra cotta and tile roof, cement, pine and canvas floors, steam heating, electric lighting, tile and marble work, hollow metal sash and skylights, hollow tile, metal lath, roof ventilators, waterproofing, ornamental iron work. Architect taking bids as soon as possible. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

School of Industrial Arts, Quarry street, Trenton, N. J. Architect, J. O. Hunt, 114 North Montgomery street, Trenton, N. J. Owner, City of Trenton, care Leon D. Hirsch, City Clerk, Trenton. Brick, two stories and basement, 80x70 feet and 25x60 feet, slag roof (steam heating, electric lighting and plumbing, res.), concrete and wood floors, metal lath, rolled steel sash. Owners taking bids due April 10 at 2.30 P. M. Thos. Day, L. H. Clayton and S. W. Mather & Son, all of Trenton, N. J., and Martin Bros., Yardville, Pa., additional bidders.

Stores and Apartments (alt and add.), 17 South Warren street, Trenton, N. J. Architect, J. O. Hunt, 114 North Montgomery street, Trenton, N. J. Owner, Scott Scamell, Trenton, N. J. Brick, three stories, 16x130 feet, slag roof, hardwood and pine floors, steam heating, electric lighting. Architect taking bids due April 12th.

School, Mt. Laurel, N. J. Architect, Wm. Klemann, Trenton, N. J. Owner, Burlington



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County School Board, Benj. Haines, Secretary. Mt. Laurel, N. J. Brick, one story (six rooms), (steam heating, electric lighting and plumbing, reserved), pine floors. Owners taking bids due April 15th.

Bridge, Assanpink Creek east of Olden avenue, Trenton, N. J. Engineer, John W. Thompson, Broad Street Bank Building, Trenton, N. J. Owner, City of Trenton, care Leon Hirsch, City Clerk, Trenton. Concrete and steel. Lowest bidder, Newton A. K. Bugbee, Trenton, N. J.

Training Barns, composition roof, concrete and wood floors. Architect has received bids.

Stores and Apartments (alt. and add.), Eighth and Taintal streets, Wilmington, Del. Architects, Brown & Waiteside, duPont Building, Wilmington, Del. Owners, Turner & Stelle, Wilmington, Del. Brick, 3 stories, 26x70 feet, slag roof (vapor heating, electric lighting, plumbing, reserved), wood floors. Contract awarded to A. S. Reed & Bro. Co., Wilmington, Del.

Garage, 1603 Broome street, Wilmington, Del. Architects, Brown & Whiteside, duPont Building, Wilmington, Del. Owner, Mrs. Geo. W. Chambers, Wilmington, Del. Stucco, 1½ stories, 20x28 feet, slate roof, wood floors, electric lighting. Contract awarded to Edw. Johnson, Wilmington, Del.

Maryland

Construction News

Bottling House, Baltimore, Md. Architect, Louis Levi, Real Estate Trust Building, Philadelphia. Owners, Standard Brewing Co., Baltimore, Md. Brick and concrete, 1 story, 42x70 feet, slag roof, cement floors (heating and lighting, reserved). Architect taking bids, due April 8th. Consolidated Eng. Co. and Frederick Decker & Son, both of Baltimore, Md., are figuring.

Building (alts.), 215-17 Courtland street, Baltimore, Md. Architect, A. Lowther Forrest, Professional Building, Baltimore. Owner, Charles Morton, 209 St. Paul street, Baltimore. New front, heating, electric lighting and general interior alterations. Plans in progress.

Bank, Richmond, Va. Architects, Sill, Buckler & Fenhagen, 11 East Pleasant street, Baltimore, Md. Owners, Federal Reserve Bank, Richmond, Va. Concrete, steel and brick, 5 stories, stone or marble trim, slag or tin roof, steam heating, electric light, electric elevator, ornamental iron work, fire escapes, steel sash,

Miscellaneous Construction News

Sub-Station "B," No. 2823, and **Frequency Changer House**, Washington, D. C. Architect, private plans. Owners, U. S. Government, C. W. Parks, Chitf, Bureau of Yards & Docks, Navy Department, Washington, D. C. Brick and steel, 34 feet high, 58x142 feet, asbestos protected metal roof, concrete and pine floors, steam heating, electric lighting, iron stairs, ornamental iron work. Contract awarded to

Dawson Const. Co., Pittsburgh, Pa. \$51,170.

Tenant House and Garage, Cedartown, Ga. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owner, Charles Adamson, 4227 Chestnut street, Philadelphia. Frame, 2 stories, 36x28 feet, shingle roof, pine floors, pipeless heaters, electric lighting. Contract awarded to J. H. Dukes & Co., Cedartown, Ga.

DELAWARE

Construction News

Residence, Laurel, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington. Owner, Sirman D. Marvil, Laurel, Del. Frame, 2½ stories, 30x45 feet, shingle roof, hardwood floors, vapor heating, electric lighting. Plans in progress.

Store (alts. and add.), 608 Market street, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington. Owners, Schagin & Braunstein, on premises. Brick, 3 stories, 24x24 feet, mill work, slag roof, pine floors, electric lighting, elevators. Plans in progress.

Radio Station, Fort duPont, Delaware City, Del. Architect, F. S. Warner, U. S. Eng., Wilmington, Del. Owner, U. S. Government, care of Lt. Col. M. Brooke, Wilmington, Del. Stucco, 1 story, 16x22 feet, Johns Manville roof, pine floors, electric lighting and fixtures, hollow tile. Owners have received bids.

Fair Buildings (12), Wilmington, Del. Architect, J. D. Thompson, Ford Building, Wilmington, Del. Owners, Directors of State Fair Association, care of Wm. B. Austin, Sixteenth and King streets, Wilmington, Del. Frame and hollow tile, 1 story, various sizes of stock barns and

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fire doors, skylights, terra cotta, hollow tile, tile, marble, slate or terrazzo work, hardwood floors, dumbwaiters. Plans in progress. Will be ready for bids in about three weeks.

Flour Mill and Elevators, Monkton, Md. Engineer, Otis McCoy, Oakley road, Mt. Washington, Md. Owners, Monkton Roller Mills, Inc., Monkton, Md. Frame corrugated iron and concrete. Plans in progress. Engineer will take bids.

Packing Plant, Pratt and Eutaw streets, Baltimore, Md. Engineer, C. A. Stroutenberg, 120 Broadway, New York City. Owner, Armour & Co., 120 Broadway, New York City. Brick and concrete. Plans in progress. Too early for details.

Store and Warehouse, 401-03 Pratt street, Baltimore, Md., and 200-04 South Eutaw street, Baltimore, Md. Architect, A. Cookman Leach, Baltimore, Md. Owners, Charles Newman, 330 West Pratt street, Baltimore, Md. Brick and concrete, two stories. Plans in progress. Too early for details.

Warehouse, 405 North Front street, Baltimore, Md. \$20,000. Architect, private plans. Owner, P. Pipitone, 430 North Front street, Baltimore, Md. Brick, two stories, 50x130 feet slag roof. Plans completed. Owner will sub-let.

MARYLAND

Contracts Awarded

Garages (12), Westminster, Berlin, Bethesda, Easton, Havre de Grace, Hurluck, Mt. Airy, St. Michaels and Salisbury, Md., and Woodstock, Va., Staunton, Va., and Charleston, W. Va. \$50,000. Architect, private plans. Owners, Standard Oil Co., Pier 2, Pratt street, Baltimore, Md. Reinforced concrete, brick, one story, 30x61 feet, slag roof, electric lighting, hollow metal skylights, fireproofing, plumbing, steel sash, metal doors, ventilators, painting. Contracts awarded to Price Construction Co., Maryland Trust Building, Baltimore, Md.

Gas Tank, Lendenhall street and Fort avenue, Baltimore, Md. \$235,000. Architects, private plans. Owners, Consolidated Gas, Electric Light and Power Co., Lexington Street Building, Baltimore, Md. Reinforced concrete, steel and iron work, painting, 219 feet diameter, 219 feet high. Contract awarded to B. F. Bennett Building Co., 123 South Howard street, Baltimore, Md., for concrete work. Contract awarded to Bartlett-Hayward Co., Scott and McHenry streets, Baltimore, Md., for tank building.

Foundry (add.), Charles and Wells streets, Baltimore, Md. \$15,000. Architect, private plans. Owners, Kennedy Foundry Co., on premises. Brick, steel and concrete, one story, composition roof, electric lighting, hollow metal skylights, ventilators, painting. Contract awarded to Frairie Bros. & Haigley, 18 Clay street, Baltimore, Md.

Apartment House, Roland avenue and University Parkway, Baltimore, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore, Md. Owner, Harold C. Hann, 4 Queen Anne's road, Baltimore, Md. Brick and stucco, slate roof, electric lighting, concrete work, plastering, painting, tile and marble work, dumbwaiters, plumbing, refrigerators. Contract awarded to Cogswell-Koether Co., 406 Park avenue, Baltimore, Md.

Bungalow, Ashburton street near Garrison

avenue, Baltimore, Md. Architect, J. Franklin Nelker, Professional Building, Baltimore, Md. Owners, Milton and Otto Langrell, 2711 Garrison avenue, Baltimore, Md. Stone foundation, frame, 2½ stories, slate roof, hot water heating, electric lighting, tile work, plastering, painting, taking bids. E. G. Turner, 15 East Fayette street, A. Knell, Jr., Law Building, A. K. Boteler, 1323 Myrtle avenue, Baltimore, are figuring.

Garage, Fremont and Mulberry streets, Baltimore, Md. Owners, A. Schauman & Co., 423 West Pratt street, Baltimore, Md. Architect, Geo. R. Callis, Jr., Knickerbocker Building, Baltimore, Md. Brick, steel, slow burning, one story, 69x82 feet, slag roof, steam heating, electric lighting, skylights (hollow metal), plastering, plumbing. Builder, Wm. Taylor, Edmondson avenue and Poplar Grove street, Baltimore, Md., is taking bids.

Sub-Station, Curtis Bay, Md. Architect, private plans. Owners, Consolidated Gas, Electric Light and Power Co., Baltimore, Md. Reinforced concrete and brick, one story, 32x41 feet, slag roof, hollow metal skylights, ventilators, dampproofing, hollow tile, plastering and painting. Cogswell-Koether Co., 406 Park avenue, Baltimore, Md., will build.

avenue, Baltimore, Md. \$3,000. Architect, Geo. R. Morris, Tide Building, Baltimore, Md. Owner, Northwestern Real Estate Co., Tide Building, Baltimore, Md. Brick foundations, frame, 1½ stories, shingle roof, hot water heating, electric lighting, tile work, plastering, painting, plumbing. Architect will build and will sub-let all contracts.

Canning Plant, Carey and Warner streets, Baltimore, Md. Architects, Owens & Sisco, Continental Building, Baltimore, Md. Owners, C. G. Summers Co., 415 Camden street, Baltimore, Md. Reinforced concrete, steel and brick, two stories, 100x300 feet, slag roof, rolled steel doors, metal skylights. Contract awarded to Consolidated Engineering Co., Calvert Building, Baltimore, Md.

Garage, 6 Beachwood road, Catonsville, Baltimore, Md. Architects, Mottu & White, 322 North Charles street, Baltimore, Md. Owner, C. S. Timanus, on premises. Frame, composition roof, steam heating, electric lighting. Contract awarded to A. Boteler, 133 Myrtle avenue, Baltimore, Md.

Warehouses (alts.), Colgate Creek, Md. \$25,000. Architect, private plans. Owners, U. S. Government, Q. M. Department, Washington, D. C. Consists of interior alterations. Contract awarded to Price Construction Co., Maryland Trust Building, Baltimore, Md.

Residences (3), Luke Drive near Brookfield, Md. (5) Calvert and Thirty-second streets, Baltimore, Md. Architect, J. F. Gerwig, Equitable Building, Baltimore, Md. Owner, Frank O. Singer, Equitable Building, Baltimore, Md. Brick, two and three stories, concrete and slag foundations, slag and tin roofs, hot water heating, electric lighting, elevators, galvanized iron work, painting, plumbing. Owner is ready for sub-bids.

Mill Buildings, Oella, Md. \$260,000. Architect, Chas. J. Main, 201 Devonshire street, Boston, Mass. Owners, Oella Mills, Oella, Md. Main building brick and steel, slow burning

construction, four stories, 156x92 feet, Dye House and Storage Building, 47x29 feet, Finishing Mill, five stories, concrete, stone, brick and steel, composition and slag roofs, hollow metal sash and skylights, mill work, cement floors, electric lighting. Contract awarded to Consolidated Engineering Co., Calvert Building, Baltimore, Md.

Office Building, Curtis Bay, Baltimore, Md. \$35,000. Architects, Ellicott & Emmert, Union Trust Building, Baltimore, Md. Owners, Riter Conley Co., Curtis Bay, Baltimore, Md. Brick and stucco, 2½ stories, 131x45 feet, slate roof, pine floors, steam heating, electric lighting, tile work, hollow tile, waterproofing. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building, Philadelphia, Pa.

Permits for New Buildings

Dwellings (2), 1037-39 Robbins street, \$4,800. Harry T. Harting (O and C), 7403 Bingham street. Brick, 2 stories, 14x41 feet, slag roof, hot water heating.

Dry Kilns, North and Margaret streets, \$10,000. Schwartz Wheel Co (O), Trenton avenue and Margaret street. P. M. Sax (C), 1205 Franklin Bank Building. Brick, 1 story, 20x40 feet, tile roof.

Garage, 1644 Cayuga street, \$800. Rosa L. Schneider (O), as above. Henry P. Schneider (C), 3713 York Road. Brick, 1 story, 15x24 feet, slag roof, stone foundation.

Wagon Shed, Reed and Dairen streets, \$1,500. Sam'l Wileniky (O), as above. Sol Shestack (C), 322 Dickinson street. Brick, 1 story, 82x40 feet, slag roof.

Garage, 934-36 League street, \$2,500. Wm. Bryant (O and C), Tenth and Washington avenue. Brick, 1 story, 32x50 feet, slag roof.

Soda Ash Storage, Snyder avenue and Swanson street, \$3,800. E. F. Drew Co. (O), Swanson and McKean streets. J. O. Hausman (C), 113 Tasker street. Iron on iron frame, 1 story, 50x40 feet.

Dwelling, Cottman and Tabor streets, \$5,000. Harry Strain (O), 2813 North Fifth street. M. Stevens (C), 910 Fanshew street. Stone, 2 stories, 26x32 feet, shingle roof, hot water heating, stone foundation.

Garage, Sixty-second and Catharine street, \$650. Wm. Bayliss (O), as above. J. D. Fisher (C), 5424 Thompson street. Brick, 1 story, 16x18 feet, slag roof.

Crane Runway, Twenty-fourth and Washington avenue, \$15,000. Philadelphia Roller & Machine Co. (O), Twenty-fifth and Washington avenue. Belmont Iron Co. (C), 222 Washington avenue. Twenty-ton runway, 76 feet, span 40 feet.

Factory, Hancock and Allegheny avenue, \$11,000. J. R. Keim Co. (O), as above. Robert E. Lamb Co. (C), 843 North Nineteenth street. Brick, 1 story, 44x44 feet, slag roof.

Factory, 70-72 Morris street, \$70,000. Baugh & Sons Co. (O and C), 20 S. Delaware avenue. One story iron on iron frame, 75x154 feet; 1 story, iron on iron frame, 75x135 feet; 1 story, brick, slag roof, 75x30 feet, all one building.

Dwelling, 307 West Rockland street, \$2,500. Carl Metz (O and C), 315 West

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Rockland street. Brick, 2 stories, 22x30 feet, slag roof, hot water heating.

Garage, 627 West Cliveden avenue (rear), \$450. J. N. Mitchell, Forty-sixth and Market streets. Stone, 1 story, 14x21 feet, slag roof.

Garage, Sixty-eighth and Yocum streets, \$1,500. Allen A. McCullough (O), 2138 South Sixty-eighth street. Geo. S. Roe (C), 6949 Saybrook avenue. Brick, 1 story, 2x32 feet, slag roof.

Dwelling, 2851 East Thompson street, \$2,200. M. Guego (O), as above. Frank Boffa (C), 3131 Filson street. Stone and

brick, 2 stories, 19x31 feet, slag roof.

Factory, Seventeenth and Cambria streets, \$2,000. Electric Service & Supply Co. (O), as above. John N. Gill Co. (C), Otis Building. Reinforced concrete underground, 20x21 concrete roof.

Toilet, Thirtieth and Race streets, \$600. Philadelphia Abattoir Co. (O and C), as above. Brick, 1 story, 10x17 feet, cement floor.

Garage, 1811 Orthodox street, \$1,200. W. Rose (O), 1822 Orthodox street. Lev Ahlers (C), 4433 Salmon street. Brick, 1 story, 19x32 feet, cement floor, stone foundation.

street, \$900. Al. Fabian (O and C), as above. Fire damage.

Stable, 2636 Cabot street, \$500. Geo. Sharp (O), 1212 North Twenty-eighth street. Richard McGlathery (C), 2306 North Twenty-sixth street. Brick wall (new front).

Dwelling, 509 East Monastery avenue, \$300. M. Townsend (O), as above. John J. Hurley Co. (C), 4416 Cresson street, Manayunk. Brick, 2 stories, 8x12 feet, slag roof.

Store and Dwelling, 749 South Second street, \$650. Abraham Levey (O), 621 South Eighth street. P. Glassman (C), 431 South Sixtieth street. Double flush bulk (new).

Store and Offices, Eleventh and Chestnut streets, \$7,500. John B. Miller (O), Land Title Building. John V. Speth & Co. (C), 1615 Sansom street. New front on Chestnut street, brick and terra cotta.

Dwelling, 15-17 West Upsal street, \$19,000. Miss Margery Lee (O), 17 West Upsal street. Sam Harting (C), 20 East Johnson street. Interior alterations and alteration.

Restaurant, 2208 Market street, \$500. A. Keuter (O and C), as above. Brick, 14x17 feet, slag roof.

Dwelling, 322 South Sixteenth street, \$500. Mrs. Obtrteuer (O), as above. Merton Green (C), 210 Liberty Building. Alterations.

Dwelling, 1624-26 West Thompson street, \$2,000. A. R. Raff Co. (O and C), 1635 Thompson street. Brick, 1 story, 32 x50 feet, slag roof.

Dwelling, 6112 Wissahickon avenue, \$500. Wm. Reeves (O and C), as above. Brick, 2 stories, 16x13 feet, rear addition.

Dwelling, 2655 Huntingdon street, \$400. Harry Cohen (O), as above. A. Nelson (C), 3300 Emerald street. Brick, 2 stories, 10x10 feet, slag roof.

Store and Dwelling, 926 South Seventeenth street, \$1,555. M. Aronivitz (O), as above. Jacob Bender (C), 1817 South Fourth street. Brick, 1 story, 1x16 feet, brick, second story 12x16 feet, stone foundation, slag roof and skylight.

Garage and Help Quarters, Broad and Mifflin streets, \$1,975. St. Agnes Hospital (O), Broad and Mifflin streets. Jas. J. Murphy (C), 4034 Powelton avenue. Alteration 4 rooms and 1 bath room, plastering and mill work.

Dwelling, 9622 Banes street, \$500. E. Maene (O and C), 9624 Banes street. Alterations and plastering.

Factory, 922 Vine street, \$1,000. Benj. Alexander (O), 1326 Chestnut street. Frank Lucchi (C), 1603 Ellsworth street. Alterations.

Shop, Fifty-eighth and Pearl streets, \$450. Jos L. Abt (O), 230 North Fifty-eighth street. Wm. J. Reiner (C), 1551 North Sixtieth street. Brick, 1 story, 15x20 feet, slag roof, stone foundation.

Dwelling, 409 South Watts street, \$300. Penn. Co. (O), 517 Chestnut street. Hays Mendenhall Son (C), 1-2, Drexel Building. New bathroom.

Store and Sales Room, 1318 Chestnut street, \$1,500. Williams & Sinkler (O), 710 Commercial Trust Building. J. Morris Daniels, (C), 2528 South Juniper street. Fire repairs.

Baggage Platform, 1018 Spring Garden street, \$1,200. Union Transfer Co. (O),

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 2416 Richmond street, \$500. J. Hunter's Sons (O), as above. Willard Myers (C), 2006 East Cambria street. Brick, 1 story, 18x20 feet, slag roof.

Dwelling, Markoe and Haverford avenue, \$500. Wm. Jones (O), Woodlyn, N. J. Warren Biscoe (C), 3954 Linden street. Alterations.

Church, 2100 East Ontario street, \$3,475. Rt. Rev. J. J. McCort (O), Eighteenth and Summer streets. H. G. Hammer, 808 North Seventeenth street. Brick, 2 stories, 15x20 feet, slag roof.

Tank Support, Twentieth and Erie avenue, \$3,000. W. T. White (O), Cleveland, O. Watson Eng. Co. (C), Cleveland, O., 5,000 gal. capacity tank.

Store and Hall, 4918 Baltimore avenue, \$2,200. Martin F. Kauffman (O), as above. F. B. Davis (C), 240 North Sixteenth street. Plumbing and lighting and plastering, interior alterations.

Factory, Wayne and Windrim avenues, \$35,000. Brown Instrument Co. (O), as above. R. C. Ballinger & Co (C), 218 North Thirteenth street. Brick, 2 stories, 30x136 feet rear addition, Brick, 2 stories, 27x40 feet front addition, slag roof and alterations.

Factory, Randolph and Jefferson streets, \$1,000. Roxborough Knitting Co. (O), as above. Wm. Steel & Son Co. (C), 34 South Fifteenth street. Alterations to floors.

Club House, 618 North Fortieth street, \$300. Vane Rep. Asso. (O), as above. J. Frank Rea (C), 3955 Ogden street. Alterations.

Garage, 1651-53-55 Staub street, \$4,600. Jacob Staub (O), Germantown avenue and Staub street. B. Gregg (C), 4456 Germantown avenue. Brick, 1 story, 47x65 feet, slag roof, stone foundation, iron skylights, cement floor.

Store, 3340 Germantown avenue, \$412. Walter S. Trainer Co (O), 3319 North Twelfth street. John Schuster (C), 3552 North Fifteenth street. New flush bulk.

Factory, 2710 North Hancock street, \$3,800. Alex. Turkington (O), Front and Lehigh avenue. Harry Shake (C), 3139 Frankford avenue. Fire damage repair.

Garage, 1217 Lindley avenue, \$4,500

Bertha G. Modell (O), as above. S. F. Reich (C), 3015 North Twenty-fourth street. Brick, 1 story, 48x54 feet, slag roof, stone foundation.

Dwelling, 5524 Boyer street, \$600. T. O'Neil (O and C), as above. Brick, 1 story, 15x12 feet, tin roof, stone foundation.

Store, 70-72 North Second street, \$10,000. John Dobson (O), 809 Christian street. E. H. Keefer & Son (C), 1321 Rodman street. Fire repair.

Garage, 1515-21 Brandywine street, \$2,500. Edith M. Hirlinger (O), 1514 Green street. Henry P. Schneider (C), 3713 York Road. Interior alterations and alterations.

Dwelling, 6211 Carpenter street, \$500. Sam Rhoads (O), as above. Christian E. White (C), 6209 Girard avenue. Brick, 7x16 feet addition, stone foundation.

Apartments, 856 Wynnewood Road, \$450. H. S. Entmarks (O), 203 North Thirty-fourth street. Maurice Nichols (C), 761 North Fortieth street. Alterations.

Dwelling, 3204 Clifford street, \$400. Rudolph Bell (O), as above. L. Weinstein (C), 948 South Third street. EEnlarge summer shed.

Hotel, 1102 Spruce street (Room), \$3,000. D. W. Van Tine (O), 1936 North Park avenue. W. Easterbrook (C), 146 North Fourth street. Brick, 1 story, 20x46 feet. Stone foundation.

Dwelling, Byberry Road, Poquessing Creek, \$1,400. St. Elizabeth Convent (O), Conwells, Pa. Alfred A. Darrah, Jr. (C), Andalusia, Pa. Frame porch, 16x8 feet, and alterations.

Sales Building, 211 North Broad street, \$1,000. Wm. H. Hahn (O), as above. Frank K. Stahl (C), 2713 North Park avenue. Elevator shaft, 3 stories, 11x21 feet, slag roof.

Residence, 6140 Ridge avenue, \$300. Chas. H. Whiteman (O), as above. Wm. H. Eddleman & Son (C), 453 Green Lane. Build new stairway.

Store and Dwelling, 319 North Eighth street, \$400. M. Kline Henry (O), as above. Benj. Teitelman (C), 632 North Franklin street. Flush bulk, new.

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Dwelling, 2653 East Huntingdon street, \$400. Vincent Syafanski (O), as above. A. Nelson (C), 3300 Emerald street. Brick, 2 stories, 10x10 feet, slag roof.

Storage Building, Jasper and York street, \$1,500. Penn Worstod Co. (O and C), as above. Brick, 1 story, 18x33 feet, slag roof, stone foundation.

Store and Storage, 1312 Walnut street, \$13,000. Max Dann (O), S. W. Cor. Thirteenth and Chestnut streets. Ketcham McQuade (C), 1029 Brown street. Brick, 1 story, 6x54 feet, and interior alterations; heating system, electric lighting and lowering first floor.

Dwelling, 3910 Fairmount avenue, \$545. E. J. Ahern (O), as above. Owen Fogarty (C), 1918 Cherry street. Brick, 1 story, 12x7 feet, tin roof, stone foundation.

Garage, Nineteenth and Sansom streets, \$4,500. De Martelly Co. (O), 1822 Chestnut street. E. E. Hollenback, Inc. (C), 1804 Brandywine street. Brick, 1 story, 32x104 feet, two new walls only and alterations.

Store and Dwelling, Seventh and Pierce streets, \$1,450. Mina Ruberk (O), 708 South Fourth street. Jos. Schechtman Bro. (C), 1734 North Seventh street. New flush bulk and alterations.

Dwelling, Rising Sun and Loudon street, \$1,725. Louise Hanshaw (O), 1621 North Front street. Chas. Simm (C), 211 Clarkson avenue. Brick, 2 stories, 16x10 feet, slag roof and alterations.

Garage, 1016-18 Spring street, \$2,000. C. M. Reber (O and C), Pensauken, N. J. Brick, 1 story, 32x56 feet, and interior alterations.

Dwelling, 233 East Allen street, \$535. Lumberman's Insurance Co. (O), 427 Walnut street. A. P. Frain (C), 319 Market street. Fire repairs.

Office Building, 123-25 South Fourth street, \$500. Forest Estate Co., 119 South Fourth street. A. P. Frain (C), 319 Market street. Flush bulk.

Factory, Woodland avenue and Island Road, \$4,000. Fels & Co. (O and C), Seventy-third and Woodland avenue. Brick, 1 story, 98x52 feet, slag roof.

Store and Dwelling, Twentieth and McKean streets, \$1,000. Ferdinand Macale (O), Twentieth and Fernon streets. Louis Friedman (C), 837 Cantrell street. Interior alterations.

Repair Shop, Main and Harvey streets, \$900. R. Hey & Son (O), Main street. Brown Const. Co. (C), 4600 Main street. Alterations.

Dye Works, Hancock and Thompson streets, \$1,000. T. A. Harris & Co. (O), 147 West Thompson street. S. J. Rea & Son (C), 1608 Fairmount avenue. Alterations to piers and floors.

WIDESPREAD USE OF REINFORCED CONCRETE IN CONSTRUCTION.

By J. P. H. Perry, of the Turner Construction Company.

(Continued from Last Week)

All this might be regarded as so much theory were it not for the great reinforced

concrete or structural concrete buildings, to say nothing of our subways, aqueducts, dams, railroad structures, etc., which dot the country. Structural concrete, however, is usually thought of in connection with building work. One has only to look at such examples as the eighteen great model factories and warehouses of the Bush Terminal Company, the four enormous rentable lofts of the Hoboken Land and Improvement Company, the development of the Degnon Terminal Company in Long Island City, or to look at Gairville, as the ten big buildings of Robert Gair Company, in Brooklyn, are known to-day, or to pick out the nationally known industrial concerns who have adopted concrete almost as a standard for their new building work, such, for example, as the General Electric Company, American Can Company, Pierce-Arrow Motor Car Company, Thomas A. Edison Works, Standard Oil Company, Vacuum Oil Company, Eastman Kodak Company, Winchester Arms Company, Colt Arms Company, and the Studebaker Company, and in fact practically every progressive, wide-awake industrial concern in the country, to appreciate how well established reinforced concrete has become in the minds of the informed public.

If the man in the street, however, would just grasp clearly "structural concrete" instead of "structural steel" the use of concrete for building purposes from the little garage, small shop or factory to the bigger industrial buildings, and in country districts, for example, the hotel, small apartment, office building, will follow almost automatically. This would be especially true if the general public could once thoroughly appreciate the fact that reinforced concrete or structural concrete for buildings does not mean that the exterior of the buildings has necessarily to be of concrete. Structural concrete means that the carrying framework or skeleton can be of concrete the same as the structural steel skeleton of the big loft and hotel buildings, while the exterior may be brick, terra cotta, stucco, limestone, marble or any other material.

Above all, there is one fundamental underlying reason for the adoption of reinforced concrete or structural concrete where it is possible efficiently to use the material, and that is the great and ever present menace of fire. Concrete buildings have given splendid account of themselves under fire conditions. The fire in the Edison Works, the San Francisco, Baltimore, Paris, Columbus and Salem conflagrations have from time to time demonstrated the permanence of concrete buildings—a greater permanence than is offered by any other form of construction. With a fire loss per capita in this country of nearly eight times that of the average European city, every thinking citizen of America owes it to himself to build fireproof, and this means concrete when he can raise the price.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

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Reserve for Losses	4,419,000.00
Reserve for Taxes	950,000.00
Reserve for Sundries	160,000.00
Surplus	8,317,502.26
TOTAL	\$28,477,242.66

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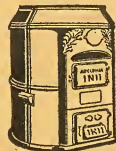
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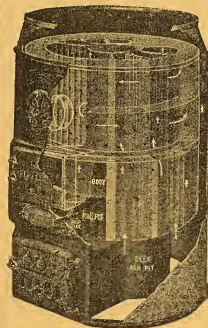
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April 17, 1918

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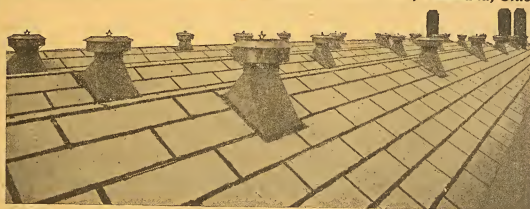


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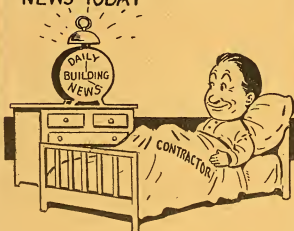


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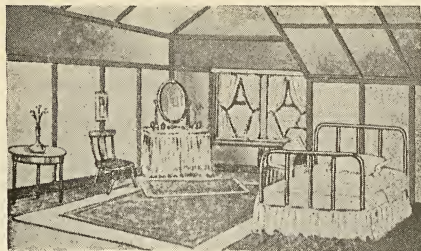
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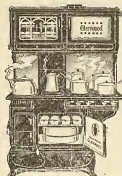
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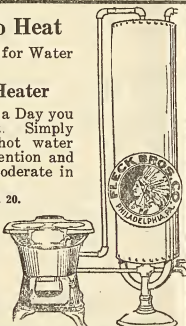
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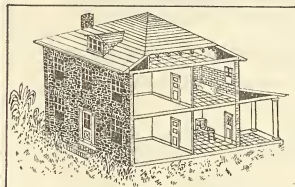
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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Number 16

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April 17, 1918

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As The Editor Sees It



CO-OPERATION with the Government at this time must go hand in hand with patriotism; we cannot be truly patriotic unless we are willing to co-operate. Our desire to do our utmost in aiding the Government is augmented by a fuller understanding of the tremendous task before the country at the present time, and of what has already been accomplished. Of greatest interest to the building trades are the facts that in three months the Cantonment Division of the Quartermaster General's Department built sixteen cantonments, each one practically a small city, comprising about 1,400 separate buildings and providing quarters for 47,000 men.

In the construction of these sixteen cantonments over 22,000 individual buildings of many types were erected for the housing of the National Army while in training. The construction cost approximately \$136,000,000, slightly more than twice the cost of building the Panama Canal. The contractors' profits on the several contracts averaged only 2.98 per cent.

The immensity of this project is shown to some extent by the fact that about 650,000,000 feet of lumber was used and that more than 80,000 carloads of materials and furnishings have been shipped to the different localities. All the buildings are durably constructed and could be used continually for many more years than the war is likely to continue.

The largest cantonments are Camp Lewis and Camp Funston, the first near Tacoma and the second at Rort Riley, Kan. The total number of men in the cantonment is about 752,000. The 22,000 buildings are lighted by 320,000 electric lamps.

* * *

IN just what way and to what extent the building industry is to be affected by the desire to best serve our country's interests is still an open question. We all are aware that non-essential business of any kind has been decried. Just what building is essential and what non-essential is a much discussed question. In a previous issue of THE GUIDE we cited the instance of England, which country must finance and plan the building of some 300,000 homes immediately at the close of the war, in order to make up the deficiency created by the great decrease in building during the period of the war.

A most interesting view of this subject is set forth by F. T. Miller in the "Record and Guide," of New York:

"Every thoughtful and patriotic citizen supports the Secretary of the Treasury in his desire to preserve the poise of business, conserve capital and resources, and increase the wealth-producing power of the Nation, subject to war priorities, as well as his desire to encourage thrift. But in the heat of the campaigns for raising war loans, encourage-

ment of thrift has naturally been given the greatest publicity.

"In his letter of March 15th to Mr. Samuel Gompers Secretary McAdoo writes, 'The successful financing of the war depends * * * upon the difference between what is *made* and what is *spent*.' While in this letter the Secretary emphasizes the importance of saving and does not emphasize the importance of making, it would be only reasonable to assume that he believes the people already understand the importance of making, as money must be made before it can be saved.

"The consumption of luxuries, 'Business as Usual,' on the one hand and saving to the point of hoarding on the other, have both been widely advocated and as widely disproved. But the investment of the results of thrift in enterprises which will result in increased earning power and enduring wealth seems to be the sane middle ground and might be called 'Business to Win.'

"As examples of extreme points of view, we may note two newspaper articles. One advocates the curtailment of construction of railroads, water power plants and the like, and the other advocates the purchase of diamond necklaces, automobiles, lavish dinners, etc. It is evident that the funds put into the water power plant would be transferred from the bank account of the owner to that of the contractor, his employees, their groceryman, etc., and, barring hoarding

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which might occur through fear, the funds would still remain available for Government use; but a newly created factor,—the water power plant,—would also remain as a wealth producer for the community, while it is evident that the money put into the dinner would be transferred from the bank account of the diner to that of the hotel proprietor, his staff, supply dealers, etc., and there would remain to the community no wealth-producing factor.

"It is unfortunate that the Secretary's letter to Mr. Gompers does not tell the building industry what to do, but what not to do.

"If, rather than a negative, the building industry might place a positive and constructive interpretation upon this letter, then every patriotic man engaged in the building industry should engage in building operations primarily required 'to protect the health and provide for the comfortable needs of our people,' and in building operations required to facilitate our wealth-producing enterprises; for making of money is necessary for the successful financing of the war, and money must be made through successful business enterprises.

"It is to be regretted that the public statements of the Secretary of the Treasury have been followed by communications from officials of the Treasury and other Departments and from their local committees, which have had a tendency to suppress many wealth-producing enterprises at their source. These do not transmit a well-balanced interpretation of the Secretary's desire to maintain the poise of business, increase the wealth-producing power of the nation, subject to war priorities, nor to his statement 'that the successful financing of the war * * * depends upon the difference between what is made and what is spent.'

"Taken as a whole, this publicity has given the impression that the war must be financed out of the past wealth and that some Governmental Departments desire to discourage constructive enterprises in order to free labor, material and capital for Government use.

"The effect of this publicity upon the building industry, which has been producing \$2,000,000,000 annually in enduring, productive wealth and which has been gradually checked during the past few years by the increasing cost of labor and materials, until the luxury features have long since been eliminated, has been that building has dropped off fifty per cent. or more. Architects' offices are empty and building labor, except in a few eastern districts, is idle.

"If only one-sixth of the building labor of the country is allowed to continue in idleness there is a consumption of the wealth of the country equal to that

consumed by a million dollar dinner each day, without any remaining evidence of wealth or wealth-producing factor to the community; the loss of wealth which otherwise might be produced for the community is nearly \$2,000,000 per day.

"This labor is highly specialized and divided into one hundred or more different trades or crafts, each of which requires different experience and mental and muscular development. Many of these men are mature and bound to their homes by family ties, and beyond the age of mental and physical readjustment. Even if this were not so, it would be impracticable to immediately shift this large volume of labor from the entire West to the congested districts of the East. If shifted, it could not be assimilated, because experience has shown that but a small percentage of the labor thus temporarily employed in new war industries can be assimilated. The shift, therefore, must be a gradual one and selective in character.

"Surplus labor throughout the country is already more prevalent than is generally appreciated. The employment bureaus of the Labor Department, together with the proposed \$250,000 traveling fund, can be depended upon only as a partial solution of the general labor problem in view of the difficulties of selection and assimilation, and particularly if the traveling fund is to be used largely for the transportation of agricultural labor, and if the prospective employer of this labor is to guarantee the repayment of traveling expenses.

"In his letter to Mr. Gompers the Secretary of the Treasury writes, 'There must be no waste.' There can be no greater waste than that of idle labor, and it would seem that idle building artisans might well be allowed employment in producing wealth for the community, at least until they can be assimilated for Governmental use.

"During the winter, building trades live upon their savings and credit. As spring approaches, after a dormant winter, their savings and credit become exhausted, and unless the usual spring work, with its earning opportunities develops, hunger and want are inevitable. The effect of unrest, due to unemployment of a considerable percentage of these trades at this time, may result in strikes and violence. Unemployed labor may form a fertile nucleus for alien propaganda.

"At first thought Secretary McAdoo's letter places upon Mr. Gompers the seemingly impossible task of persuading the idle building trades that the Government has work for them while they are facing conditions of unemployment, and also places upon him the task of

instilling sentiments of patriotism under very trying circumstances.

"While building materials are in the main wrought by building labor from raw material, and while some building materials are by-products of war necessities, there is now reported a surplus of many building materials and building material concerns are going out of business.

"The construction industries in general are so disorganized that a nationwide conference is being arranged under resolutions of the National Association of Builders' Exchanges, the National Builders' Supply Association, with the co-operation of the American Institute of Architects, in order to readjust the industry as far as possible to meet the crisis, and to render its united resources most readily available for governmental needs.

"There already exists, however, a shortage in the supply of buildings. The number of cubic feet per capita has decreased for a number of years. Rents are increasing and laws are now proposed in Congress to regulate rents. In other words, in face of an increasing demand, we are cutting off our supply.

"Under these conditions, why should not the building industries place a well-balanced and constructive interpretation upon all of Secretary McAdoo's statements and refuse to believe that this useful industry has been singled out by any Department for embargo?

"The general policy of the Administration in refraining from the definition of essentials and non-essentials has saved the industrial organism of this country from serious disarrangement. All agree with the wisdom of the policy of priority for war needs.

"Government burdens have been impartially distributed upon all industries, and the building industry is particularly unfortunate in having applied to it alone, without a clear definition, the essential and non-essential policy. And until this is either more clearly defined or changed to the general policy of priority the industry must continue to place the most constructive interpretation possible on the statements of the Secretary of the Treasury, even though it may not understand why further efforts should be made to free its labor while its labor is already in idleness, or to free its materials while many of its materials are not being used, as well as why many of the non-essentials and luxury producing industries are allowed the use of capital, labor and materials, unhampered by publicity and direct interference.

"In exchanging the ownership of funds, construction frees and gives earning power to capital otherwise locked up in land, while not exhausting but creating

capital out of natural resources and raw materials, the majority of which are not essential for Government use. Buildings are one of the most permanent forms of wealth, a means of producing more wealth and one of the most secure bases of increased credit. The withholding of funds from circulation through this industry tends to decrease rather than increase national wealth.

"Money saved by curtailing the consumption of food, clothing or luxuries is added to the national wealth, but the curtailing of building does not add to the national wealth; it is a deferred charge, part of our war debt, to be paid after the war is over at an increased cost, probably by a disorganized industry.

"The curtailment of building is not a saving, but an expense *during* the war, because through lack of normal facilities the cost of everything is increased, since buildings are primary tools of industry, necessary for the production of all other tools of industry as well as for the production of the necessities of life, food, clothing and shelter.

"If in an endeavor to free labor, materials and capital for *future* Governmental use we are holding in idleness labor which we are unable to assimilate we are confronted with the economic law of Diminishing Returns.

"In his letter of February 27 to Mr. Frank W. Conner, Secretary McAdoo writes 'where it (construction) is a question of *need*—be it on account of sanitary conditions or because, without such new construction, other operations *essential* at this time for the welfare of the country would suffer—there is no doubt such work should be undertaken. This applies equally to construction work in cities, towns and farming districts.' And referring to luxury building, he states 'where it is a question of building a new home simply because it would afford greater comfort the operation should not be undertaken.'

"But for a clearer understanding of 'need' and 'essential' it has been necessary for us to consider other communications from the Secretary together with the conditions prevailing throughout the country.

"The resolutions of the War Industries Board of March 25th, although non-constructive in tone, do not discourage 'new undertakings' * * * contributing * * * indirectly toward winning the war * * * or even for indirect war needs.'

"But the term 'not essential' is again used without definition and these resolutions therefore do not shed any further light upon this important matter or seem to alter existing conditions or rulings.

"However, in his letter to Bernard N.

Baruch, at the time of the latter's appointment as chairman of the War Industries Board, President Wilson in outlining the functions of the Board particularly emphasized in paragraph 3, 'The studious conservation of resources and facilities by scientific, commercial, and industrial economies.' The construction industry is a national facility, and as such its conservation is thus enjoined.

"Setting up National Welfare as the final test, and from both the President's

and Secretary's communications it is evident that a constructive national spirit which fosters creative enterprises is essential in order to insure a 'difference between what is *made* and what is *spent*.' As the world is gradually drifting from individualism to various forms of governmental control, it is vital to the progress and happiness of humanity that these forms of governmental control shall be constructive rather than purely regulative in character."

EDITORIAL NOTES

L. K. Comstock & Co., contracting engineers, have recently moved their offices from 30 Church street, New York, to 21 East Fortieth street.

* * *

W. G. Boales, of the New York office of the Hoffman Specialty, has been appointed inspector of shells, located at Jefferson Barracks, St. Louis, Mo.

* * *

Arthur B. Daniels, formerly treasurer of the Knickerbocker Portland Cement Company, was recently elected president of that concern, succeeding H. Struckman. A. D. Naylor was elected treasurer.

* * *

August M. Kleemann, architect, formerly located at 741 Broad street, Newark, N. J., has discontinued his office and will conduct the practice of his profession at his residence, 908 Grove street, Irvington, N. J.

* * *

Lewis F. Pilcher, State Architect, has been elected chairman of the Committee on Prison Architecture of the American Prison Association. This is the first time that a New York State authority on architectural affairs has been selected for this important post.

* * *

The Association of Dealers in Masons' Building Materials, at its recent annual meeting, elected the following officers for the ensuing year: Francis N. Howland, president; Frank E. Wise, vice-president; Nathan Peck, treasurer. The directors elected included: Francis N. Howland, Frank E. Wise, Nathan Peck, John H. Mahnken, William K. Hammond, William H. Barnes, Ernst Braund, John Wilson, Wright D. Goss, John C. McNamara, Andrew J. Brislin, Stephen V. Duffy, Graham Murtha, C. A. McGuire and Joseph Philbrick.

* * *

National Pipe and Supplies Association will hold its annual convention at Cleveland, Ohio, May 13-14, 1918. Headquarters at the Hotel Hollenden.

* * *

American Concrete Institute will hold its annual convention at Atlantic City, N. J., June 24 to 26. Secretary, Henry B. Alvord, 27 School street, Boston, Mass.

American Society for Testing Materials will hold its twenty-first annual meeting at Atlantic City, N. J., June 25-28, with headquarters at the Hotel Traymore.

* * *

National Hardwood Lumber Association will hold its twenty-first annual convention in Chicago, Ill., June 20-21. The headquarters will be located at the Congress Hotel.

* * *

Regulations requiring inclusion in every contract for war construction of clause limiting daily service of workmen to eight hours have been suspended by War Department for duration of present emergency.

* * *

Lumber production of 39,200,000,000 feet in United States in 1917 is preliminary estimate of Forest Service, based upon reported cut of 845 sawmills, each of which cut 5,000,000 feet or more during year. About one-half country's mills have made reports so far.

* * *

New York City Better Homes Exposition will be held in the Grand Central Palace from May 18 to 25, inclusive, under the management of Louis W. Buckley.

* * *

American Hardware Manufacturers' Association will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., June 11 to 13, 1918. F. D. Mitchell, secretary, Woolworth Building, New York City.

* * *

New Jersey State Association of Master Plumbers will hold its annual convention in the East Orange Rink, 15 Halstead street, East Orange, N. J., May 14-16, 1918. State secretary, W. F. Beck, 36 North Center street, Orange, N. J. In connection with this convention there will be an exhibition of manufacturers' and jobbers' supplies.

* * *

National Metal Trades Association will hold its next convention at the Hotel Astor, April 22 to 25, inclusive. The convention proper is arranged for morning and afternoon sessions on April 24 and 25.

* * *

John H. Ilder, of the Pennsylvania Committee of Public Safety, has completed a survey of the housing conditions of Chester, Pa.

Besides making a report to the City Council, Mr. Ihlder will send appeals to Washington for aid in taking care of the men needing homes in Chester.

* * *

Business men of Milton, Pa., at a recent meeting, formulated a plan to provide 300 new houses in that city. At present, it is stated, there is not available a single vacant house. The plan provides for subscriptions and aid from the United States Government.

* * *

The Congressional housing bill appropriating \$50,000,000 to erect homes for workmen at munition plants, etc., has been amended by adding \$10,000,000 for erecting houses in Washington for the great influx of Government clerks.

* * *

A bill has been favorably reported in the United States Senate empowering the President to control the lumber business of the country. Difficulty in procuring suitable timber for airplanes is said to have instigated this proposed legislation.

* * *

Dr. John S. Molitor, Chief of the Bureau of Housing Conditions of the Pennsylvania State Department of Health, in a recent address at Seranton on "Housing Conditions and City Betterment," said that there was great opportunity for improvement in that city. "There should be a restriction," he said, "so that not more than twelve families should occupy an acre of ground." He counseled the elimination of high board fences in favor of open iron fences, far more sanitary and sightly, as he expressed it.

* * *

The Town Commissions of Bayonne, N. J., have been petitioned by citizens to amend the building code so as to prohibit the construction of stores and apartment houses in residence districts.

* * *

The Troy Development Corporation, Troy, N. Y., has been organized with a capital of \$200,000, to help solve the housing problem in that city. It will make special efforts to provide housing for the workmen soon to be employed at the Watervliet arsenal.

* * *

The Federal Homes Corporation has been organized at Jersey City, N. J., with \$2,000,000 capital, to construct homes for workers soon to be engaged at the immense shipbuilding plant turning out Government work on the Newark meadows.

* * *

C. A. Patterson, architect, formerly located at 15 East Fortieth street, has moved to 50 East Forty-second street, New York.

* * *

Buchman & Kahn, architects, have moved their offices from 30 East Forty-second street to 56 West Forty-fifth street, New York.

* * *

John B. Rainbow, architect, has recently moved his offices from 9 East Fortieth street to 14 West Fiftieth street, New York.

* * *

Stern & St. Johns, general contractors, have

recently moved their offices from 1432 Park Place to 215 Rochester avenue, Brooklyn.

* * *

John W. F. Bennett, formerly Deputy Commissioner of Water Supply, Gas and Electricity of the City of New York, is now associated with Ernest P. Goodrich and A. Pearson Hoover, consulting engineers, 261 Broadway, New York.

* * *

Garrett P. Serviss addressed the New York Chapter of the American Association of Engineers at its meeting at the Hotel McAlpin, Wednesday evening, April 10. The subject of the address was "The Glory of the Engineer."

* * *

White Fireproof Construction Company, 286 Fifth avenue, New York, announces that R. L. Bertin has assumed the position of chief engineer of the company. This concern is now ready to undertake the complete erection of reinforced concrete structures of all kinds.

* * *

A movement is underway to provide for the erection of an additional building for New York University, Elmer F. Brown, Chancellor. This projected structure will be located on University Heights and will cost in the neighborhood of \$350,000. At the present time the name of the architect who will prepare the plans is not available and no details as to number of stories or ground dimensions have been announced. Day & Klauder, 925 Chestnut street, Philadelphia, will be the advisory and supervising architects.

* * *

The creation of a Construction Division in the War Department, as already announced by Acting Secretary Crowell, indicates that the great building projects, amounting to over a billion dollars and destined to accelerate the prosecution of the war, are finally to be co-ordinated. The new division will replace the cantonment organization and will deal comprehensively with the whole War Department building program. At the head of it has been placed Professor A. N. Talbot, of the University of Illinois, president of the American Society of Civil Engineers, and the board includes John Lawrence Mauran, of St. Louis, president of the American Institute of Architects; Charles T. Main, of Boston, president of the American Society of Mechanical Engineers; John R. Alpine, representing the American Federation of Labor; R. Goodwyn Rhett, of Charleston, S. C., president of the Chamber of Commerce of the United States; E. W. Rice, of Schenectady, N. Y., president of the American Institute of Electrical Engineers; Frederick L. Cranford, of Brooklyn, president of the General Contractors' Association of New York, and Oscar A. Remm, of Chicago, representing the Building Construction Employers' Association.

There are already under way in the United States eighty-five big jobs, aggregating \$205,000,000. There are in prospect now 120 more, representing \$278,000,000. In addition, there are jobs for housing troops, representing \$390,000,000, while hospital construction alone represents \$10,000,000.

It is reported that all work will be done henceforth under the "cost plus sliding scale of fixed fee," in which fixed fees to contractors range from 7 per cent. on contracts of \$100,000 or less down to as low as 1½ per cent. on the very largest amounts. The fee, according to this form, is fixed when the contract is let, and if the cost exceeds the estimate because of higher labor and material prices, the contractor receives no additional compensation whatever. Labor and material prices always will be subject to approval by the Government.

HOG ISLAND HOUSING.

At a time like this, when the nation is urged to speed up and to economize, it becomes the duty of every American to assist the Administration whole-heartedly, even though such aid can only be rendered through the suspicious medium of criticism of the acts of the Administration's representatives in certain specialized capacities and on whom the Government is depending to solve the problems confronting it.

The housing proposition for our war industries is shown by existing conditions to be a necessity, particularly for the shipyards, whose speedy production is so vital to winning this war for democracy.

The writer is a Philadelphia architect of twenty-five years' experience, and having designed thousands of city and suburban houses in this and other cities for operative builders and private owners, feels that he is not only fully qualified, but that it is his right and duty to shed some light upon the accomplishments (or lack thereof) of the Commission in control of this work.

The conclusion of this Commission to build nothing but permanent houses was eminently proper, but after months of investigation and consultation its labor has resulted, as far as Hog Island Housing is concerned, in plans and specifications which show a most surprising ignorance of the entire subject.

An examination of the plans and specifications on which bids have been requested discloses the following conditions:

These houses are two-story houses 16x29 feet and 16x31 feet, the former containing a living room and a combination kitchen and dining room on the first floor and two bed rooms and a bath room on the second floor, being virtually a five-room house. The latter is similar in plan on the first floor, but on the second floor there are three bed rooms and a bath room, the largest bed room being but 8 feet 5 inches wide and the other bed rooms 7 feet 4 inches wide, while the bath room is disproportionately large, having a width of 6 feet 7 inches. As no room has more than one window, an idea is easily formed of the kind of plans that have been furnished.

Architecturally the designs of these houses give ample proof that the Philadelphia architects and builders can learn nothing from these drawings which will be an improvement on their methods of design and construction.

The writer's contention is that the houses are not only poorly designed from the stand-

point of both architect and householder, but that economy has been entirely lost sight of, and that great waste of materials, labor, time and money will result should these houses be built according to the present plans and specifications.

The building laws of the city and State are repeatedly ignored, while those of New York govern this work to its detriment, such as building all flues for heaters and ranges in centres of party walls (very poor construction); providing for one entrance to two cellars (creating an easement against each property if the houses are to be sold separately); the use of 2-inch lumber (Philadelphia laws require 3-inch lumber); and many other things are shown which conflict with our rules and regulations.

The following are a few of the conditions found which compel the direction of criticism against the men responsible for them.

The foundation walls for these houses are specified to be laid in cement mortar, something never done in this kind of house, and if this item only added one dollar per perch to the cost of the stonework, it would mean a waste of between \$50,000 and \$60,000.

The cellar floors are specified to be of concrete between 6 inches and 7 inches thick. This means an unnecessary expenditure of from \$40,000 to \$50,000 over the usual practice.

The plans show 13-inch brick walls on all fronts and the ends of blocks or rows of houses, 9-inch walls are all that are ever used on such work, and all that Philadelphia laws require even for three-story houses of 16 feet frontage. Why use 50% more of brick than is necessary and which in this case is probably one of the building materials most difficult to obtain at present.

Another source of waste is the use of concrete copings on party walls and chimneys, called for on these plans.

Some idea of the waste in lumber may be gained when attention is called to the fact that 2x12 joists and 2x10 ceiling beams are specified.

The plastering as specified is more expensive than is necessary, an instance of this being shown in the porch ceilings, specified to be plastered on expanded metal lath, which is first to be given a coat of paint.

The millwork for these houses, as specified, will have to be specially made, whereas if stock millwork were used the saving would be very considerable. Waste is very evident in this work, as, for instance the use of three columns and one pilaster on a 6x6 porch (not mentioning the fact that there is a similar porch on the rear of these houses as well).

Millwork for a house of similar size and character may be obtained to-day for \$175 to \$200, whereas the millwork for these houses will cost from \$300 to \$350 per house; a saving of \$100 per house will mean a reduction in the cost of this operation totaling \$200,000 on millwork alone.

The posts, rails and balusters on porch steps, if they cost only \$5 per house, show \$10,000 waste.

The roofing materials specified will show a

cost of at least 30% more than is necessary or customary on such work.

The plumbing systems have been laid out according to New York rules, whereas, if Philadelphia rules and regulations had been allowed to govern a saving of hundreds of thousands of dollars would be effected.

Information has been received that some of the estimates have been double what they should be. As plumbing for such a house can be installed for \$325, one can readily see that absolute waste and ignorance of the subject is evidenced in this important feature.

The heating, although elaborately specified, is not shown on the plans, and it is therefore extremely difficult for a contractor to figure on this work intelligently.

There are no outlets shown on the drawings for the lighting fixtures, the wiring under these specifications is more costly than necessary.

Last, but not least, the lighting fixtures are to be of special design, which means a useless increased cost when it is possible to secure substantial and attractive fixtures from stock much more quickly and cheaply.

Should these houses be built under the plans and specifications as prepared and indiscriminately distributed to all classes of builders for bids, they will cost in the neighborhood of \$3,000 each. This expenditure, plus the cost of ground, pavements, grading, fencing, etc., will mean that the workingman will have to pay \$3,500 to \$3,800 (possibly more) for practically an old-fashioned Philadelphia house containing four rooms and bath.

The operative builders of Philadelphia can build attractive houses containing six rooms and bath for \$2,000 to \$2,200, including paving, grading, fences, cement work, paper-hanging and lighting fixtures. There is at the present time a small operation of such houses in course of construction in the Elmwood section, and these figures were compiled but a few weeks ago from actual bids.

These are but a few of the criticisms which can with perfect honesty and frankness be aimed at the results of all these months of work on the part of the Housing Commission.

All this leads to the very pertinent question of the make-up of the Housing Commission and the ability of the men in charge of this work to do that which they have been authorized to do.

The plans for these houses have been prepared by a New York firm of architects, Carrere & Hastings, who are among the leaders in their profession in the design of millionaires' homes, public buildings and the like, but who are entirely out of their element when it comes to planning small and economic houses, as proven by these plans and specifications prepared in their offices.

Owen Brainerd, in charge of the planning of these houses for the Emergency Fleet Corporation, is an associate of Carrere & Hastings, and it would be interesting to know why this firm was selected to prepare these plans and specifications.

Philadelphia has many skilled architects, practical, able, well equipped operative builders, sub-contractors and material men, who

would be glad of the opportunity to do their bit and assist the Government in this work.

Why not let the Government remove the embargo on building materials coming to Philadelphia, gather together the responsible and dependable operative builders, let them marshal their sub-contractors and material men and proceed with this work just as they would in their private work?

In this way the necessary homes could be built at a minimum of cost and a maximum of speed and with the result that a dwelling section would be created which would be pleasing in appearance, comfortable for the dwellers therein and so easily salable that all moneys advanced by the Government would be returned through the rent and sale of these properties in the least possible time.

In order to do this these homes must be so built as to be desirable and must compare favorably in cost with other houses in the vicinity to permit of sales within the capacity of the men whom they are built to benefit.

E. ALLEN WILSON,
Architect.

BOOK REVIEWS.

"Making Advertising Pay," by Harold F. Eldridge, fulfills in every respect the promise of its title. It does not deal with abstract theories of advertising, but gives concrete examples, drawn from the experiences of national advertisers, which are of great value to the man who aims to procure the best results from his advertising.

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CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Apartment House (alts.), northwest corner of Forty-ninth and Chestnut streets. Architect, Mahlon H. Dickinson, Bellevue Court Building, Philadelphia. Owner's name withheld. Reinforced concrete and brick porches, (3) 8x16 feet, slag roof. Plans completed. Architect ready for bids.

Store Building (alts.), 1654 Ridge avenue, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner's name withheld. General interior alterations, brick work, electric lighting, hot water heating, tile work, reinforcing beams, hardwood floors, metal bulks, electric elevator, painting. Plans in progress. Architects will take bids in ten days.

Residence (alt. and add.), Thirteenth and Wingoheoking streets, \$36,000. Architect, private plans. Owner, John F. McGinty, 2010 North Broad street, Philadelphia. Brick, 2 stories, 17x45 feet, slag and slate roof, hardwood floors, hot water heating, combination lighting. Owner will build.

Stores and Apartments (4), Sixtieth and Larchwood avenue, Philadelphia. Architect, private plans. Owner, Henry Gelb, 442 South Sixtieth street, Philadelphia. Brick, 3 stories, (2) 16x50 feet and (2) 20x50 feet, slag roof, hot water heating, electric lighting, tile work, metal bulks. Owner is taking sub-bids on all lines.

Residence to Store and Apartments (alts.), 256 North Sixth street. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner's name withheld. Consists of entire remodeling, tin roof, yellow pine floors, steam heating, electric lighting, tile and marble work, front addition, 1 story, 5x18 feet, metal bulks. Builder, N. Litman, 2030 South Fifth street, is taking sub-bids.

Store and Residence (alts.), northeast corner Fourth and Bainbridge streets. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, H. Faden, on premises. Consists of changing interior of store, electric lighting, tile and marble work, flush bulks, leaded glass, millwork, metal ceilings. Plans completed. Will take bids in a few days.

Garage (alts.), Juniper and Cherry streets, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner's name withheld. Brick, 4 stories, 15x140 feet, changing building to garage. Plans in progress. Too early for details.

Warehouse (alts.), 206-10 North Twenty-first street, Philadelphia. Architect, private plans. Owners, Mallabieu & Conrey, 1816 Market street, Philadelphia. Consists of interior alterations, office partitions, stairways, changing elevators, etc. Owners will supervise work and will take sub-bids.

Buildings Nos. 1373 and 75, Tenth and Vine streets and 1129 Callowhill street. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owner, James A. Humphreys, 1021 Callowhill street, Philadelphia. Brick; reinforced concrete, stone, terra cotta trim, 1

story, 60x120 feet, and 1 story, 17x132 feet, slag roof, cement and pine floors, hollow skylights, fire and steel rolling doors, hollow metal doors (heating, plumbing and lighting reserved). Architects taking bids, due April 17th. Geo. Kessler Cont. Co., Drexel Building; Standard Const. Co., 1713 Sansom street; Smith-Hardican Co., 1606 Cherry street; A. R. Raff Cont. Co., 1635 Thompson street; Wark-Yardley Co., 1737 Filbert street, and Lam Building Co., 1001 Wood street, are figuring.

Garage, Frankford Road and Allegheny avenue, Philadelphia, \$16,000. Architect, H. B. Weldon, 1606 Cherry street, Philadelphia. Owner, Harry Drake, 3139 Frankford avenue, Philadelphia. Brick, 1 story, 80x120 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, gasoline storage system. Owners will take bids in one week.

Garage (add.), 340 East Somerset street (rear). Architect, Peter Kuhn, 3058 North Eighth street, Philadelphia. Owner's name withheld. Brick, slow burning construction, 1 story, 17x138 feet, front elevation, 103x138 feet, rear elevation, slag roof, stone foundations, cement floors, electric lighting, roof ventilators (heating reserved). Architect has received bids.

Moving Picture Theatre, 1523-35 South street, \$50,000. Architect, H. B. Weldon, 1606 Cherry street, Philadelphia. Owner, A. Wax, care of Keystone Theatre, 937 South street, Philadelphia. Brick, 1 story, 95x120 feet, slag roof, cement floors, electric lighting. Plans in progress. Too early for details.

Store (add.), southwest corner of Thirteenth and Rockland streets, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Geo. W. Brodman, 2116 North Thirty-first street, Philadelphia. Brick, 1 story, 20x30 feet, slag roof, pine floors, electric lighting. Owner taking bids, due as soon as possible. J. Sims Wilson Co., 1125 Brown street; E. C. Duroll, 1713 North Twenty-fourth street; and Frank Lucei, 1603 Ellsworth street, are figuring.

Store (alts.), 1027 Market street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Ernest Schwem, care of architect. Consists of sprinkler installation, concrete tank, 10,000 gallon capacity, vault lights, electric work. Architect taking bids, due April 17th. Lam Building Co., 1001 Wood street; Smith-Hardican Co., 1606 Cherry street; D. J. McNamee, 1621 North Fifteenth street, and Conneen Const. Co., 1737 Filbert street, are figuring.

Patrol Stations (alts.), Sixty-first and Thompson streets and Sixty-fifth and Woodland avenue. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, City Hall, Philadelphia. Interior alterations, millwork, plastering and painting. Lowest bid submitted by Hogg Const. Co., 1634 Sansom street, Philadelphia.

Residences (2), Parke avenue, above Sixty-fifth street, Oak Lane, \$10,000. Architect, pri-

vate plans. Owner, Michael Britz, care of builder. Brick and stucco, 2½ stories, 15x39 feet, slag roof, steam heat, electric and gas lighting, hardwood floors. Builder, H. H. Wehmeyer, 509 West Cumberland street, is taking sub-bids.

Shrapnel Factory, Frankford Arsenal, Philadelphia, \$200,000. Architect and construction engineer, Edw. J. Benter, Frankford Arsenal, Philadelphia. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal, Philadelphia. Concrete and brick, 2 stories, slate roof, rolled steel sash, fire doors. Plans in progress. Owners will take bids in about two weeks.

Garage (alts. and add.), Aspen and Brooklyn streets, Philadelphia. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, A. S. Butz, 745 North Forty-first street, Philadelphia. Brick, 2 stories, 80x80 feet, reinforcing floors, cement work, hot water heating, electric wiring, electric elevator. Architects have received bids.

Apartment (alts.), 4956 Chestnut street, Philadelphia. Architect, Henry E. De Hoff, 48 South Sixty-first street, Philadelphia. Owner, Wm. H. Windolph, 28 North Twelfth street, Philadelphia. Consists of general interior alterations, millwork, etc. Owner is taking bids. E. J. Kreutzburg, 1345 Arch street, is figuring.

Store and Residence (alts. and add.), 317 Spruce street, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner's name withheld. Brick, 3 stories, 20x55 feet, general interior remodeling, addition 3 stories, 15x20 feet, slag roof, hot water heating, electric lighting, plumbing, yellow pine floors. Plans about completed. Architect will take bids in a few days.

Naval Training Camp Extension, Sept. 2924, Air Compressor, Spec. 2923, Radial Brick Chimney to Aircraft Factory, Spec. 2920, Wharf Repairs, Spec. 2899, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Too early for details.

Power House and Coal Pocket, Tulip and Somerset streets, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Brick, reinforced concrete and terra cotta, 1 story and basement, 48x77 feet and 42x22 feet, asbestos roof, cement and brick floors, rolled steel sash, hollow metal doors, iron stairs, roof ventilators, waterproofing, ornamental iron work. Owners taking bids, due April 22nd. Wm. R. Dougherty, 1610 Sansom street; H. E. Batou, 1713 Sansom street; F. A. Havens & Co., 845 North Nineteenth street, and Roydhouse-Arey Co., 112 North Broad street, are figuring.

Store and Dwelling, Main street, Roxborough, Philadelphia. Architect, Henry E. De Hoff, 48 South Sixty-first street, Philadelphia.

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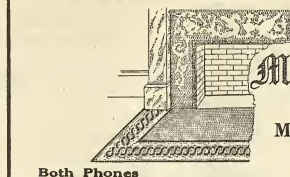
Owner, James Goodwin, 4407 Main street, Manayunk, Philadelphia. Brick, 2 stories, 20x75 feet, slag roof, hot air heating, electric lighting, tile and marble work, hardwood floors. Owner taking bids, due as soon as possible. C. O. Struse, Walnut Lane and Cresson street; John H. Barley, Nicetown Lane and E street, and Wm. H. Eddleman & Son, 453 Green Lane, Roxborough, Philadelphia, are figuring.

Factory, Erie avenue, east of Richmond street, Philadelphia. Architect, Frederick Webber, Morris Building, Philadelphia. Owner's name withheld. Brick, 2 stories, 84x99 feet, slow burning construction, slag roof, yellow pine floors, steam heating, electric lighting. Architect taking bids, due April 19th. Crump & Co., Denckla Building; Albert Zelfelder, 151 South Broad street; H. H. Wehmeyer, 509 West Cumberland street; Barclay White & Co., 1713 Sansom street, and Standard Const. Co., 1713 Sansom street, are figuring.

Residences (21), with Garage privileges, northeast corner Kingsessing and Frazier street. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Steltz & Maloney, 1208 Chestnut street, Philadelphia. Brick, 2 stories, (2) irregular size, (8) 16x33 feet and (11) 15x37 feet, slag roof, stone foundations, hot water heating, combination lighting, yellow pine floors. Plans in progress. Owners will be ready for sub-bids in one week.

Factory Building, Germantown, Philadelphia. Architect, private plans. Owner's name withheld. Brick, 2 stories, 32x94 feet, slag roof, stone foundations, cement and pine floors (heating and lighting reserved). Wm. Gruhler & Co., 219 East High street, is taking sub-bids, due April 18th.

Store (alt.), 1027 Market street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Ernest Schwemm, care of architect. Consists of sprinkler installation, concrete tank, 10,000 gallon capacity, vault lights, electric work. Architect taking bids, due April 17th. The following is the correct list of bidders: Lam Building Co., 1001 Wood street; Smith-Hardi-



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can Co., 1606 Cherry street; D. J. McNamee, 1621 North Fifteenth street, and Conneen Const. Co., 1737 Filbert street, are figuring.

Caretaker's Lodge House, Bartram Gardens, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Department of Public Works, City Hall, Room 113. Brick, 2 stories, 28x30 feet, slate roof, hot air heating, electric lighting, yellow pine floors. Owners taking bids, due April 23rd. George Dobbins, 4200 Chester avenue, and Conneen Const. Co., 1737 Filbert street, are figuring.

and Conneen Const. Co., 1737 Filbert street, are figuring.

Convenience Station, Wm. Lanier Park, Twenty-ninth and Dickinson streets, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Department of Public Works, City Hall, Room 113. Brick, 1 story, 24x24 feet, slate roof, cement floor. Owners taking bids, due April 23rd. George Dobbins, 4200 Chester avenue, and Conneen Const. Co., 1737 Filbert street, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Bomb Proof House, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, Frankford Arsenal, Philadelphia. Reinforced concrete and brick, 1 story, 20x100 feet, slag and ready roof, steam heating, electric lighting, concrete floors, kalamein doors, waterproofing, ornamental iron work. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Residence (alts. and add.), 79 West Johnson street, \$4,000. Architect, P. S. Wurster, care of owner. Owner, E. H. Geschick, on premises. Brick, interior alterations, 1 story, 16x14 feet, slag roof, hot water heating, pine and hardwood floors (lighting reserved). Contract awarded to Standard Const. Co., 1713 Sansom street, Philadelphia.

School (alts.), Fifty-seventh and Haverford avenue, Philadelphia, \$113,000. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Stone, brick and reinforced concrete, 3 stories and basement, composition and slate roof (steam heating, electric lighting re-

served), copper roof, cement, maple and mastic and asphalt floors, hollow tile, metal lath, hollow metal skylights, fire doors, fire escapes, roof ventilators, metal weatherstrips, metal ceilings, wire work, ornamental iron work. Contract awarded to Standard Const. Co., 1713 Sansom street, Philadelphia.

School Building (alts.), Pine and Quince streets, Philadelphia, \$2,559. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street. Brick work, millwork, plastering. Contract awarded to Mitchell Bros., 2125 Race street, Philadelphia.

Factory (add.), Forty-ninth and Parkside avenue, Philadelphia. Architects, Andrew J. Sauer Co., 908 Chestnut street, Philadelphia. Owners, Cunningham Piano Co., 1101 Chestnut street, Philadelphia. Reinforced concrete and brick, 1 story, 64x78 feet, slag roof, electric lighting, concrete floors, hollow metal skylights, fire doors, waterproofing. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

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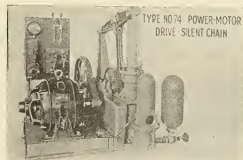
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Pennsylvania Building

Garage (add.), Sixtieth and Dakota streets, Philadelphia, \$20,000. Architect, private plans. Owner, Andrew J. Boylan, 5955 Spruce street, Philadelphia. Brick, 1 story, 50x200 feet, slag roof, cement floor, electric light, stone foundations. Owner will build.

Storage Building, Snyder avenue and Vee-nacoe street, Philadelphia, \$6,000. Architect, private plans. Owners, General Manufacturing Co., Swanson and Snyder avenue, Philadelphia. Brick, 2 stories, 25x112 feet, slag roof, cement floors, electric lighting, stone foundations. Contract awarded to H. P. Friend, Inc., Norristown, Pa.

Store Building (alts.), 1024 Chestnut street, Philadelphia. Architects, Hays-Mendenhall & Son, Drexel Building, Philadelphia. Owner, Chas. Pomerantz, northwest corner of Fifty-second and Walnut streets, Philadelphia. Consists of interior alterations to restaurant, partitions, new stairways, tile and mosaic floors, painting, electric lighting, stone work, painting, iron work, flush bulks. Contract awarded to Hays-Mendenhall & Son, Drexel Building, Philadelphia.

Garage, Navy Yard, Philadelphia, Spec. No. 2888. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Washington, D. C. Brick, steel and reinforced concrete, 1 story, 62x142 feet, slag or gypsum roof, concrete floors, steam heating, electric lighting, rolled steel sash, hollow metal doors, hollow tile, safety treads, dampproofing, ornamental iron work (gasoline storage system reserved). Contract awarded to Hughes-Foulkrod Co., Commonwealth Building. Alternates 1, 2, 5, 6, 7, 8 and 9.

Artillery Firing Range, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, Frankford Arsenal, Philadelphia. Reinforced concrete and brick, jolting house, 1 story, 8x8 feet; powder house, 1 story, 10x10 feet; range, 338 feet, slag and ready roof, steam heating, electric lighting, concrete floors, kalamain doors, waterproofing, ornamental iron work. Contract awarded to Wm. Linker Co., 831 Cherry street, Philadelphia.

Residence (alts.), Sixty-fifth avenue and Thirtieth street, Oak Lane. Architects, Magaziner & Eberhardt, 603 Chestnut street, Philadelphia. Owner, B. Selig, 4258 Parkside avenue, Philadelphia. Interior alterations, car-

pentry. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Storage Building, Broad and Lehigh avenue, Philadelphia, \$8,000. Architect, Horace Trumbauer, Land Title Building, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Brick, 1 story, 16x100 feet, slag roof, cement floors (electric lighting reserved). Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

Gas Prod House and Coal Bin, Bridesburg, Philadelphia, \$15,000. Architect, private plans. Owners, Fayette R. Plumb Co., Inc., Tucker and James streets, Philadelphia. Reinforced concrete and brick, 2 stories, 35x20 feet, ready roof, cement and pine floors, hollow tile. Contract awarded to Rust Eng. Co., Pennsylvania Building, who want sub-bids.

Shop and Garage (add.), 1904-06-08 East Clementine street, \$5,600. Architect, private plans. Owner, Victor Steinberg, 3143 Kensington avenue. Brick, 1 story, 50x56 feet, slag roof, stone foundations, cement floors, electric lighting. Contract awarded to Arthur Brown, 1905 East Clearfield street.

Sales and Service Building, 1421 North Broad street, Philadelphia, \$13,000. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Heymann & Bros., Widener Building, Philadelphia. Stone front, brick, 2

stories, 25x160 feet, slag roof, cement floors, stone foundations, steam heating, electric lighting, tile work, cement floors, mill work, skylights, dumb waiters. Contract awarded to D. Henwood, 1509 Wood street.

Residence (alts.) to Banking House, 6328 Vine street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Frank Di Bernardino, on premises. Brick, 1 and 3 stories, 20x28 feet, slag and tin roof, parquetry floors, tile and marble work, hollow metal skylights (heating, lighting and plumbing reserved), stone foundations, ornamental iron work. Contract awarded to Nicholas Nardy, 763 South Thirtieth street, Philadelphia.

Boiler House (alts.), Pelham Road and Horter streets, Germantown, \$5,700. Architect, Wm. H. Timm, Abbott Building, Philadelphia. Owners, Germantown Steam Co., 349 West Horter street, Germantown. Brick, 1 story, 32x45 feet, electric lighting, cement floors, hollow metal sash and skylights and doors. Contract awarded to W. O. Springer, 1624 Latimer street, Philadelphia.

Toilet Rooms 4 (alts.), 406 Market street, Philadelphia, \$3,500. Architect, private plans. Owners, Bell Telephone Co., Seventeenth and Arch streets, Philadelphia. Plumbing, mill work and plastering, marble work. Contract awarded to Albert Zellfelder, 151 South Broad street, but not yet signed.

PENNSYLVANIA Construction News

Warehouse (alt. and add.), Huntingdon, Pa. Architects, Charles Hillman & Son, 400 Chestnut street, Philadelphia. Owners, Charles Miller & Sons, Huntingdon, Pa. Brick, general interior and exterior alterations, 3 stories, 55x100 feet, electric lighting, rolled steel sash, fire doors. Owners are ready for bids.

Bridge, Chester, Pa. Engineer, Eng. F. Long, Norristown, Pa. Owners, City of Chester, Department of Parks and Public Property, Chester, Pa. Reinforced concrete, 75 feet long, 26 feet wide. Owners taking bids, due April 22nd. Whitaker & Beal, Philadel-

phia; Chester Const. Co., Chester, Pa., and W. F. Reilly, Chester, Pa., are figuring.

Sheds (3), Temporary, Chester, Pa. Architect, private plans. Owners, Philadelphia Suburban and Gas and Electric Company, care of R. F. Ballard, Chester, Pa. Frame, 1 story, 24x150 feet, tar paper roof. Owner is building.

Residence, Penfield, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, J. T. O'Neill, Brookline, Pa. Frame and stucco, 2½ stories, irregular shape, shingle roof, vapor heating, electric lighting, hard-

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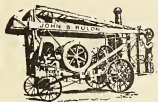
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wood floors. Architects taking bids, due as soon as possible. D. R. Evans, Beechwood, Pa., and Oscar E. Lobb, Llanerch, Pa., are figuring.

Warehouse, Pottstown, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, Gudebrod Brothers, Pottstown, Pa. Brick, 2 stories, 35x100 feet, slag roof, concrete and pine floors, fire doors. Architects taking bids, due as soon as possible. Fred H. Kaiser and William Wiand, both of Pottstown, Pa., and Driscoll Co., Stock Exchange Building, Philadelphia, are figuring.

Farm Buildings (4) (alts. and add.), near West Chester, Pa. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner's name withheld. Stone, general interior and exterior alterations, 1 and 2 stories and sewage disposal. Plans in progress.

Stores (5), Third and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Penn Realty Co., Chester, Pa. Brick, 1 story and basement, 19x80 feet to 100 feet, slag roof, stone foundations, combination lighting, tile and marble work, cement work, metal bulks. Will build five instead of six. Revised plans completed. Owners taking sub-bids.

Nurses' Home, Phillipsburg, Centre County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Phillipsburg Hospital, Cottage State Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, lighting and plumbing separate bids). Architect has received bids.

Hospital Ward Building "J," Farview, Wayne County, Pa. Architect, J. M. Shirk, 421 Chestnut street, Philadelphia. Owners, State Hospital for Criminal Insane, H. G. Ashmead, secretary, 284 City Hall, Philadelphia. Brick and steel, 2½ stories, 97x37 feet, slate and slag roof, cement floors, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel skylights, fire doors, iron stairs, hollow tile, metal lath, elevators, roof ventilator, ornamental iron work, wire work. Lowest bid submitted by Hower & Stender, Scranton, Pa.

Residence (alts. and add.), Wynnewood, Pa. Architects, Mills & Van Kirk, Harrison Building Philadelphia. Owner, Langdon Lea, Bala, Pa. Interior alterations, 1 story, 14x14 feet, addition, shingle roof, hot water heating extension, electric work and fixtures, painting, papering. Plans in progress.

Cottage, Gladwyne, Pa. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, Dr. S. B. Ludlum, Gladwyne, Pa. Stone, 2½ stories, 40x32 feet, shingle roof, maple plank floors, hot water heating, electric lighting, tile and marble work, plumbing. Plans in

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progress. Architect will take bids in two weeks.

Silk Mill, Weissport, Pa. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owners, Bowmanstown Silk Co., Bowmanstown, Pa. Brick, 1 story, 26x65 feet, slag roof, pine floors, hollow metal skylights. Plans about completed.

Machine Shop, No. 1 (add.), Allentown, Pa. Architect, Robert Ochs, City Realty Building, Bethlehem, Pa. Owners, Aldrich Pump Co., Allentown, Pa. Brick and steel, 1 story, 80x80 feet, slag roof. Plans in progress.

Twin Houses (6), West Bethlehem, Pa. Architect, C. F. Spangenberg, South Bethlehem, Pa. Owners, Herman & Jones, Bethlehem, Pa. Frame, 2½ stories, 32x44 feet, slate roof, pine floors, hot air heating, electric lighting. Plans in progress.

Silk Mill, Bowmanstown, Pa. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owners, Bowmanstown Silk Co., Bowmanstown, Pa. Brick, 2 stories, 16x60 feet, slag roof, pine floors hollow metal skylights. Plans in progress.

Residence, Bethlehem, Pa. Architect, A. W. Leh, South Bethlehem, Pa. Owner, William Klotz, Bethlehem, Pa. Brick, 2 stories, 41x30 feet, shingle roof, hardwood floors, electric lighting, heating undecided. Architect taking bids due as soon as possible. Geo. Merdinger and Mr. Garber, both of South Bethlehem, Pa., are figuring.

Freight Station, South Bethlehem, Pa. Architect, private plans. Owners, Lehigh Valley Transit Co., Allentown, Pa. Brick, 1 story, 59x79 feet, concrete and wood floors. Revised plans in progress.

Church (alts.), Norristown, Pa. Architect, E. T. Boggs, 136 South Fourth street, Philadelphia. Owners, All Saints' Church, care of Rev. Edw. E. Woble, Norristown, Pa. Consists of Caen stone altars. Architect is taking bids.

Garage, Elkins Park, Pa. Architect, H. Rex Staehouse, 129 South Fifth street, Philadelphia. Owner, Joseph B. Haber, 1010 Race street, Philadelphia. Frame and stucco, 2 stories, 22x20 feet, slate roof, cement floor, steam heating. Plans in progress. Architect will take bids in one week.

PENNSYLVANIA

Contracts Awarded

Generating Plant, Allentown, Pa. Architect, private plans. Owners, United Gas Improvement Co., Allentown, Pa. Reinforced concrete, 1 story, 17x60 feet, concrete roof and floors. Contract awarded to Ochs Const. Co., Allentown, Pa.

Manufacturing Plant, Machine Shop No. 2, Allentown, Pa. Architect, Robert Ochs, City Realty Building, Bethlehem, Pa. Owners, Aldrich Pump Co., Allentown, Pa. Brick, 1 story, 52x152 feet, slag roof. Contract awarded to Ochs Const. Co., Allentown, Pa.

Factory, Sixth street, Chester, Pa. Architect, private plans. Owner, Wm. O. Howland, Chester, Pa. Brick, 1 story, 32x40 feet. Contract awarded to B. W. Sidwell, Chester, Pa.

Store (alts. and add.), 309 Market street, Chester, Pa. Architect, private plans. Owner, Abram Greenberg, Chester, Pa. Brick, 1 story, 12x16 feet, slag roof, pine floors, flush bulks. Contract awarded to R. H. Scroggins & Son, Chester, Pa.

Residence, Eddystone, Pa. Architect, pri-

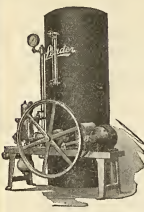
ate plans. Owner, Charles Wood, 50 North Owen street, Chester, Pa. Brick, 2 stories (6 rooms), slag roof, pine floors, electric lighting. Contract awarded to R. H. Scroggins & Son, Chester, Pa.

Residence (alts.), 15 West Third street, Chester, Pa. Architect, private plans. Owner, Moses Levy, Chester, Pa. Brick, general interior alterations, 2 stories. Contract awarded to R. H. Scroggins & Son, Chester, Pa.

Residence, Upland, Pa. Architect, private plans. Owner, Mrs. McCray, Chester, Pa. Brick, general interior alterations, 2 stories. Contract awarded to R. H. Scroggins & Son, Chester, Pa.

Grading and Masonry, extension of Satterlee siding on East Penn Branch and Main Line Branch, Pa. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railroad Co., Reading Terminal, Philadelphia. Consists of grading, concrete work, stone work. Contract

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awarded to H. Denburger Cont. Co., Trenton, N. J.

School, Lower Saucon Township, Bethlehem, Pa. Architect, A. W. Leh, South Bethlehem, Pa. Owners, Lower Saucon School District, Lower Saucon Township, Bethlehem, Pa. Brick, 2½ stories, 26 x 71 feet, slate roof (hot air heating, electric lighting, pine floors. Contract awarded to Butz & Clader, Allentown, Pa.

Silk Mill (add.), Emaus, Pa. Architect, private plans. Owners, Zollinger Silk Co., Emaus, Pa. Brick, 1 story, 60x130 feet (heating and lighting reserved), slate roof, concrete and wood floors. Contract awarded to Arthur P. Hauser, Emaus, Pa.

Garage and Laundry, Overbrook, Pa. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owner, Le Roy K. Leas, Overbrook, Pa. Brick and stucco, 1 and 2 stories, 30x26 feet and 20x23 feet, slate and shingle roof, cement and pine floors, hollow tile (electric

lighting, plumbing and heating reserved), waterproofing and dampproofing. Contract awarded to J. D. Lengle, Wayne, Pa.

Operating Pavilion, Chester Hospital, Chester, Pa. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Chester Hospital, Chester, Pa. Donor, H. H. Houston (memorial), Ninth and Kerlin streets, Chester, Pa. Reinforced concrete, 2 stories, slag roof, electric lighting, tile and marble work, cement floors, passenger elevator. Contract awarded to Wm. Provost, Jr., Chester, Pa.

Machine Shop, Cornwells, Bucks County, Pa. Architect, private plans. Owners, Badenhausen Boiler Co., on premises. Steel, hollow tile and brick, 70 feet high, 200x345 feet, asbestos roof, cement floors, electric lighting, rolled steel sash, hollow tile. Contract awarded to A. R. Raff Cont. Co., 1635 Thompson street, Philadelphia.

NEW JERSEY Construction News

Group of Buildings, Cape May, N. J. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Frame and brick, 1 story; garage, 26x23 feet; gate house, 18x11 feet; sump house, 12x9 feet; power house, 55x36 feet; coal bin, 60x36 feet; officers' building, 90x27 feet; laundry building, 96x31 feet; isolation group gallery, 80x40 feet; brig and guard house, 79x27 feet; dispensary, 110x23 feet; receiving building, 148x60 feet; barracks, 95x27 feet, ready roofing, cement and pine floors, steam heating, electric lighting, fire doors, metal lath. Lowest bidders: Eaton, Brown & Simpson, Inc., 90 West street, New York City, \$294,737.75; time, 90 days; H. H. Wehmeyer, Inc., 1004 W. Lehigh avenue, Philadelphia, \$296,384; time, 90 days.

School, Glassboro, N. J. Architects, Moffett & Stewart, Inc., 30 N. Third street, Camden, N. J. Owners, Board of Education, Glassboro, N. J. Brick, stone and reinforced concrete, 2½ stories, 70x146 feet, slag roof (steam heating, electric lighting, plumbing, furniture reserved), rolled steel sash, wood and composition floors, metal lath, safety treads, roof ventilators, fire and kalamein doors, damp-proofing, ornamental iron work. Lowest bidders: Wills-Ludwick Co., 34 S. Seventeenth street, Philadelphia, \$37,000; J. D. Pasquale, Vineland, N. J., \$95,000.

Store (alts.), 1132 Broadway, Camden, N. J. Architects, Moffett & Stewart, 30 N. Third st., Camden, N. J. Owner, Howard B. Lee, Camden, N. J. Brick, 2 stories, 40 feet front, electric lighting, tile work, flush bulks. Plans in progress. Architect will take bids in a week.

School (alts.), Lambertville, N. J. Architect, Wm. A. Klemann, Trenton, N. J. Owners, Lambertville School Board, care of Walter F. Hayhurst, District Clerk, Lambertville, N. J. Consists of new toilet facilities. Revised plans in progress.

School of Industrial Arts, Quarry street, Trenton, N. J. Architect, J. O. Hunt, 114 N. Montgomery street, Trenton, N. J. Owners, City of Trenton, care of Leon D. Hirsch, City Clerk, City Hall. Brick, 2 stories and basement, 80x70 feet and 25x60 feet, slag roof, concrete and wood floors, metal lath, rolled steel sash (heating, plumbing and electric work reserved). Lowest bid on masonry submitted by J. H. Morris, Broad Street Bank Building, Trenton, N. J.

Residence, near Princeton, N. J. Architects, Wilson, Eyre & McIlvaine, 1003 Spruce street, Philadelphia. Owner, Donald Grant Herring, 33 Vineland street, Princeton, N. J. Stone and brick, 2½ stories, 48x28 feet and 28x24 feet, shingle roof, stone foundations, hot water heating, electric lighting, pine floors. Architects taking bids, due as soon as possible. R.

C. Ballinger & Co., 218 North Thirteenth street, Philadelphia, only bidder.

The Engineering Department of the Erie Railroad Co., 50 Church street, New York, is preparing plans for the rebuilding of the machine and locomotive shops at Twelfth and Provost streets, Jersey City, N. J., recently destroyed by fire, with loss of about \$200,000.

Gilbert C. Higby, 207 Market street, Newark, N. J., architect and engineer, is preparing plans for a new shell loading plant for the California Shell Loading Co., New York, recently incorporated.

The Engineering Department of the Federal Shipbuilding Co., 16 Dey street, New York, has completed plans for the construction of the following additions at the shipyards, Kearny meadows, Kearny, N. J.: Machine shop, to cost \$225,000; forge and blacksmith shop, \$100,000; two-story office building, \$250,000; iron and brass foundry, \$75,000; rigging shop, \$10,000; toilet building, \$4,000. All brick and steel.

New Jersey Contracts Awarded

The American Smelting and Refining Co., Perth Amboy, N. J., has awarded contracts to Ira Crouse, 511 Division street, for carpenter work, and Horace Crowell, 109 State street, Perth Amboy, for mason work, at \$75,000, for the erection of a two-story, brick and terra cotta general utilities building at its works. The structure will be U-shaped, 75x122 feet.

Warehouse, Trenton, N. J., \$100,000. Architects, Peuckert & Wunder, 310 Chestnut st., Philadelphia. Owners, Crescent Insulated Wire & Cable Co., Trenton, N. J. Reinforced concrete, 3 stories, 83x103 feet, slag roof, hollow tile, metal lath, elevators, safety treads, waterproofing and dampproofing, ornamental iron work, rolling steel doors, fire doors, hollow metal skylights, rolled steel sash (heating, plumbing, electric work and elevators reserved). Contract awarded to Barclay White Co., 1713 Sansom street.

Car Barn (fire damage repairs), Newton avenue, Camden, N. J. Architect, private plans. Owners, Public Service Railway Co., B. G. Knight, Newark, N. J. Brick, 1 story, slag roof, carpenter work and painting. Contract awarded to Mockett Const. Co., Sixth and Market streets, Camden, N. J.

Miscellaneous Construction News

Treasury Annex, Madison Place and Pennsylvania avenue, Washington, D. C. Architect, Cass Gilbert, 244 Madison avenue, New York City. Owners, U. S. Govt., care of Jas. A. Wetmore, Washington, D. C. Brick, terra cotta, reinforced concrete, marble, stone and granite, 6 stories, basement and sub-basement, 187x111 feet, tile and copper roof, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash, hollow metal skylights, and doors, cement floors, metal lath, 3 passenger and (1) freight elevators, safety treads, metal window guards, metal ceilings, waterproofing, wire work, ornamental iron work. Lowest bidders: Irwin & Leighton, 126 N. Twelfth street, Philadelphia, limestone, \$997,400 and \$987,000; marble, \$1,190,400 and \$1,255,000; Boyle-Robertson Const. Co., Washington, D. C., limestone, \$1,047,334 and \$1,240,

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624; marble, \$1,247,589 and \$1,321,589; granite, \$1,254,153 and \$1,289,141.

Store (1) and Apartments (3), (alts. and add.), Sixth and Shipley streets, Wilmington, Del., \$12,000. Architect, W. E. Hance, 204 W.

Twenty-fourth street, Wilmington, Del. Owners, Edw. Reynolds Sons, Wilmington, Del. Brick, 4 stories, 24x45 feet, slag roof, pine floors, combination lighting. Plans completed. Architect ready for bids.

Albert Schmitt (C), 2449 Hancock street. Brick, 2 stories, 18x22 feet, slag roof, hot air heating.

Storage Building, Lehigh avenue and Broad street, \$8,000. Phila. & Reading R. R. Cwy. (O), Twelfth and Market streets. Irwin & Leighton (C), 126 N. Twelfth street. Brick, 1 story, 16x100 feet, slag roof.

Garage, Fifty-fifth and Chestnut streets, \$23,000. Wm. E. Calhoun (O), 6016 Walton avenue. J. D. Fisher (C), 5426 W. Thompson streets. Brick, 1 story, 100x129 feet, slag roof.

Boiler House, Forty-ninth and Botanic avenue, \$35,000. Geo. W. Smith & Co. (O), Thirty-ninth and Powelton avenue. John N. Gill & Co. (C), Otis Building. Brick, 2 stories, 15x85 feet, Gypsum roof.

Printing Office, 251 N. Fifty-second street, \$2,500. Joe Fischer (O and C), 249 N. Fifty-second street. Brick, 1 story, 20x85 feet, slag roof, cement floor, stone foundations.

Garage, Thirty-fifth and Grays Ferry avenue, \$300. J. A. Clark (O and C), on premises. Brick, 12x28 feet, slag roof, 1 story.

Garages (14), 1501-23-25-27-29-31 Widner place, 1506-08-14-16-1515-17-7-9 Nero street, \$4,200. I. Cofman (O), 417 Lafayette Building. P. Robin (C), 2322 E. Cambria street. Brick, 1 story, 12x20 feet, slag roof.

Store and Dwelling, 710 S. Fourth street, \$450. M. Zaltein (O), on premises. P. G. Glasshiefer (C), 537 Morris street. Brick, 1 story, 4x7 feet and alterations.

Shop and Dwelling, 741 S. Warnock street, \$2,000. Angelo M. Perna (O), on premises. Carmine Mattia (C), 433 N. Sixty-fifth street. Brick, 2 stories, 18x38 feet, slag roof.

Dwelling, Bustleton, south of Cottman st., \$1,600. Geo. Shallcross (O), Frankford. C. H. Weiss (C), 9512 Bustleton avenue. Brick, 2 stories, 16x26 feet, slag roof.

Garage, 951 Foulkrod street, \$950. Geo. W. Sheldeneck (O), 949 Foulkrod street. John Fotheringham (C), 3367 Frankford avenue. Brick, 1 story, 16x20 feet, slag roof.

Office Building, Richmond and Norris sts., \$250,000. Wm. Cramp & Sons (O), on premises. Stacy Reeves & Sons (C), 2011 Market street. Brick, 9 stories, 146x40 feet, slag roof, steam heating.

Shed, Stenton and Wyoming avenues, \$500. Earle Gear & Machine Co. (O), on premises. E. E. Hollenback (Inc) (C), 1804 Brandywine street. Open shed, 1 story, 16x24 feet, slag roof.

Garage, Torresdale avenue and "E" street, \$3,000. Louis Wather Mfg. Co. (O), on premises. Geo. H. Thirsk (C), 1919 Berks street. Brick, 1 story, 41x42 feet, slag roof and supports for tank.

Toilet Facilities, Packer and Seventh sts., \$1,500. Penna. R. R. Co. (O and C), Broad St. Station. Frame, 1 story, 10x23 feet.

Storage Building, Snyder and Weeacoe sts., \$6,000. Genl Mfg. Co. (O), Swanson and Snyder avenue. H. P. Friend, Inc (C), Norristown, Pa. Brick, 2 stories, 25x112 feet, slag roof.

Garage, Sixty-fourth and Sherwood avenue, \$1,350. Robert M. Scott (O), on premises. Alfonso Verdi (C), 6145 Girard avenue. Stone, 1 story, 21x22 feet, slag roof.

Garage, 837 Warnock street, \$420. Joseph C. Gerbron (O), on premises. M. Stevens (C), 910 Fanshaw street. Brick, 1 story, 12x20 feet, shingle roof, cement floor.

Dwelling, Cottman and Dungan sts., \$3,100. James Young (O), 223 E. Cambria street. Michael Stevens (C), 910 Fanshaw street. Brick, 2 stories, 14x40 feet, slate roof, hot water heating.

Garage, 2014 Kensington avenue, \$700. R.

MARYLAND Construction News

Church (add.), Port avenue and Towson street, Baltimore, Md. Architect, Geo. R. Callis, Jr., Knickerbocker Building, Baltimore, Md. Owners, Our Lady of Good Counsel R. C. Church, on premises. Brick, stone trim, steel and galvanized iron work, ornamental iron work, electric lighting, dampproofing, plumbing, tile, marble and slate work, plastering and painting. Plans in progress.

Store (alts.), 604-06 West Baltimore street, Baltimore, Md. Architect, George R. Callis, Jr., Knickerbocker Building, Baltimore, Md. Owners, New York Hat Co., on premises. Consists of general interior alterations. Plans in progress.

Dwellings (8), Sparrows Point, Md. Architect, Fred F. French, 299 Madison avenue, New York City. Owners, Bethlehem Steel Co., Sparrows Point, Md. Frame or brick or terra cotta block or stucco, 2½ stories, shingle roof, steam heating, electric lighting, skylights, dampproofing, stucco work, plastering, painting, tile and marble work, hardwood floors. Owners taking bids. Singer-Pentz Co., Equitable Building, and W. E. Burnham, Law Building, Baltimore, are figuring.

Dwellings (294), St. Helena, Md. Architect, E. L. Palmer, 513 North Charles street, Baltimore, Md. Owners, U. S. Shipping Board, Lexington Building, Baltimore, Md. Frame, brick foundations, asphalt, slate and shingle roof, electric lighting, also (4) kitchens and

mess halls, and boiler house. Owners taking bids. C. L. Stockhausen Co., Gay and Water streets; Consolidated Eng. Co., Calvert Building; H. D. Watts Co., Garrett Building; Gladfelter & Chambers, 632 West Thirty-sixth street, all of Baltimore, and John Lowrey, 8 West Fortieth street, New York City, are figuring.

Factories (2), Leadenhall and West streets, Baltimore, Md. Architect, private plans. Owners, F. X. Ganter Co., on premises. Brick, 3 stories, 70x200 feet and 65x123 feet, tin or slag roof, steam heating, electric lighting, hollow metal skylights, roof ventilators, plumbing, elevators. Owners taking sub-bids.

Office Building (add.), Locust Point, Md. Architect, O. G. Simonson, Maryland Casualty Tower Building, Baltimore, Md. Owners, Baltimore Dry Docks and Ship Building Co., on premises. Brick, steel and concrete, 3 stories, slag roof, stone trim, steam heating, electric lighting, ornamental iron work, rolled steel sash, metal doors, metal ceilings, skylights, roof ventilators, vault lights, fireproofing and dampproofing, terra cotta, hollow tile, composition floors, tile, marble and slate work, plumbing, plastering and painting. Owners taking bids, due April 18th. Price Const. Co., Consolidated Eng. Co., West Const. Co., and Hicks, Tase & Norris, Inc., all of Baltimore, Md., are figuring.

MARYLAND Contracts Awarded

Business Building, 1120 Cathedral street, Baltimore, Md. Architect, Fred Beall, 1939 Pennsylvania avenue, Baltimore, Md. Owners, Adams & Denslow, on premises. Brick, 3 stories, 28x48 feet, slag roof, steam heating, electric lighting, skylights, dampproofing, tile work, metal bulks. Contract awarded to H. M. Reinhart, 513 Calvert Building, Baltimore, Md.

Garage, Fremont and Mulberry streets, Baltimore, Md. Architect, Geo. R. Callis, Jr., Knickerbocker Building, Baltimore, Md. Owners, A. Schauman & Co., 423 West Pratt street, Baltimore, Md. Brick, steel and concrete, 1

story, 69x82 feet, concrete foundations, slag roof, steam heating, electric lighting, skylights, concrete floors. Builder, Wm. Taylor, Edmondson avenue and Poplar Grove street, Baltimore, Md., is taking sub-bids.

Warehouse and Canning Factory, Wolfe and Preston streets, Baltimore, Md. Architect, J. Franklin Nelker, Professional Building, Baltimore, Md. Owners, Roberts Bros., on premises. Brick, 1 story, 65x86 feet and 45x86 feet; boiler house, 20x20 feet, slag roof, plumbing, concrete work. Contract awarded to P. J. Cushen, 217 St. Paul street, Baltimore, Md.

Permits for New Buildings

O is the abbreviation for owner. **C** is for contractor.

Philadelphia

Garages, Keyser and Logan streets, \$1,800. John F. Conlin (O and C), 5340 Germantown avenue. Brick, 1 story, 46x20 feet, slag roof. Garage, 1310-18 N. Fifth street, \$14,000.

J. Cohen (O and C), 1330 N. Fifth street. Brick, 1 story, 75x200 feet, slag roof.

Dwelling, 2805 N. Mascher street, \$2,800. Gustav Spitz (O), Waterloo and Somerset sts.

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DAVID FRANCE CO., Tarkenton Street Wharf, Delaware River, Philadelphia.

Sever (O), 4706 Penn street, Frankford. Wm. Macknet (C), 5900 Erdrick street. Brick, 1 story, 20x24 feet, slag roof, cement floors.

Houses (9), Thirteenth and Wingochocking sts., \$36,000. John F. McGinty (O and C), 2010 N. Broad street. Brick, 2 stories, 17x15 feet, slag and slate roofs, hot water heating.

Engine House, Tulip and Somerset streets, \$150,000. Phila. & Reading R. R. Co. (O), Twelfth and Market streets. The Austin Co.

(C), Bulletin Building. Reinforced concrete, 1 story, 217x110 feet, slag roof.

Store House, 629 Market street, \$1,500. John J. Sullivan (O), 737 Land Title Building. Sam J. Rea & Son (C), 1608 Fairmount avenue. Iron and frame, elevator shaft and pent house on roof, 10x10 feet, covered galv. iron.

Storage Shed, 1126-28 Vine street, \$12,000. Phila. Gear Works (O and C), 1124 Vine st. Brick, 1 story, 27x36 feet, slag roof.

Brick, 1 story, 13x12 feet and alterations.

Store and Dwelling, 1323 Point Breeze avenue, \$425. J. P. Stuhlraeger (O), on premises. P. Dillon (C), 1223 S. Twentieth street. Brick, 2 stories, 12x16 feet, slag roof.

Dwelling, 2755 Germantown avenue, \$300. A. Loeb (O), on premises. H. P. Werner (C), 32455 Germantown avenue. Brick, 12x12 feet, slag roof.

Dwelling, Trenton and Lotterly streets, \$400. A. Jacobs (O and C), 2151 E. Lotterly street. Brick, 2 stories, 12x9 feet, slag roof.

Dwelling, 509 S. Forty-first street, \$1,000. J. P. Ellis (O), on premises. J. P. Hess (C), 105 S. Second street. Brick, 2 stories, 10x12 feet, slag roof.

Storage, 316 S. Front street, \$650. Cyrus Marter (O), 25 N. Third street, Camden, N. J. Di Medio Bros. (C), 407 Division street, Camden, N. J. New slag roof and repair fire damage.

Storehouse and Office, 1004-26 Spring Garden street, \$11,180. Union Transfer Co. (O), 907 Real Estate Trust Building. J. Morris Daniels (C), 252 S. Juniper street. Alterations and erect 2 partitions, heating, plumbing, lighting.

Store and Dwelling, Cola and Myrtlewood street, \$500. H. Davis (O), 1725 N. Thirty-first street. W. K. Collyers (C), 2009 N. Twenty-ninth street. Inside alterations.

Dwelling, 1157 S. Twelfth street, \$1,100. G. Misaglio (O), on premises. F. Accompra (C), 1540 Dickinson street. Brick, 2 stories, 14x16 feet and alterations.

Stable, 1216 Washington avenue, \$400. C. C. A. Baldi (O), on premises. Giuseppe Rossi (C), 934 S. Eighth street. Alterations.

Store and Dwelling, 1401 S. Thirteenth st., \$950. D. J. Pappano (O and C), 1211 Wharfton street. Alterations to store.

Dwelling, 1336 E. Susquehanna avenue, \$500. Casper Wagner (O), 2353 E. Susquehanna avenue. Robert Beatty & Son (C), 2321 E. Fletcher street. New front wall and alterations.

Store and Dwelling, 1628-30 S. Second st., \$800. A. Kava (O), on premises. Morris Staller (C), 616 South street. New front and flush bulk.

Dwelling, Sixtieth and Pine streets, \$915. F. D. Fleming (O), Liberty Building. Davis & Clayton (C), 1817-19 N. Twentieth street. Fire damage repairs.

Machine Shop, 1217-33 Spring Garden st., \$100,000. Hugo Bilgram (O), 1233 Spring Garden street. Warren & Moore & Co. (C), Thirteenth and Market street. Reinforced concrete, 3 stories, 54x36 feet and 75x70 feet.

Dwelling, 636 Durfor street, \$500. Abe Tabachnek (O), on premises. Jacob Cooper (C), 207 McKean street. Brick, 1 story, 11x15 feet, slag roof.

Dwelling, 643 Durfor street, \$1,000. Yetta Paeker (O), on premises. Jacob Cooper (C), Brick, 2 stories, 12x16 feet, slag roof, alterations.

Store and Dwelling, 1016-18 Cherry street, \$1,000. James McCrea & Bro (O), 1325 Arch street. U. S. Hunsberger (C), 735 Cherry st. Alterations.

Factory, Front and Laurel street, \$20,000. Mary Disston Est (O), on premises. F. W. Van Loan (C). Repair fire damage.

Garage, Sixtieth and Dakota streets, \$0,000. Andrew J. Boylan (O and C), 5955 Spruce st. Brick, 1 story, 50x200 feet, slag roof.

Storage Building, 2633 Christian street, \$350. American Ice Co. (O), Sixth and Arch streets. Geo. W. Crozier, Jr. (C), 114 N. Sixth street. New front wall.

Dwelling, 119 Necturine street, \$500. Thos. Stanton (O), 113 Vine street. Thomas Connor (C), 3329 N. Fifth street. Alterations.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Factory, 5027 Beaumont avenue, \$1,700. King Fifth Wheel Co. (O and C), on premises. Brick, 1 story, 22x50 feet, slag roof.

Factory, 110 N. Third street, \$800. J. Samuels (O), on premises. Wm. Morrow (C), 320 Harming street. Fire repairs.

Dwelling, 7916 Creshelm Drive, \$480. Dr. Geo. Woodward (O), Chestnut Hill. James Spear Co. (C), 1823 Market street. New heater.

Dwelling, 434 S. Forty-fourth street, \$555. Mrs. H. C. Wood (O), on premises. James Spear Co. (C), 1823 Market street. New portable heater.

Apartments, 2320 Tioga street, \$7,500. Geo. R. Goodman (C), 3614 N. Marvine street. W. G. Isles & Son (C), 806 Levick street. Brick, 3-story rear addition, 16x17 feet, and alterations.

Store and Dwelling, 1520 S. Second street, \$500. Chas. Weinstein (O), Fifth and McKean street. Jos. Carlucci (C), 1030 Mifflin street. Brick, 1 story, 11x11 feet, slag roof and alterations.

Dwelling, 1224 Snyder avenue, \$1,000. J. Meisack (O), on premises. Angelo Codamo (C), 2026 S. Eighth street. Brick, 2 stories, 16x17 feet, slag roof.

Factory, 120 Pegg street, \$1,400. Phil Wenderly (O), 130 Pegg street. Harry Brooklehurst (C), 512 W. Norris street. Rebuild front wall and first floor, 18x60 feet.

Dwelling, 2037 Mt. Vernon street, \$1,000. Nellie Quirk (O), 702 Chestnut street. Geo. Eves (C), 1831 Brandywine street. Interior alterations.

Store, Twenty-fifth and Lehigh avenue, \$500. F. A. Croyen (O and C), Twenty-fourth and Lehigh avenue. Change front alteration.

Dwellings, 4601-3-5-7 Orthodox street, \$1,200. Smedley & Bro. (O), Asylum pike and Orthodox street. Geo. Byers (C), 1747 Foulrod street. Frame, 1 story, 16x10 feet, slag roof.

Office, Fourth street and Allegheny avenue, \$1,000. Reading R. R. (O), Reading Terminal Station. W. J. Jones (C), 2927 N. Fifth st. Brick, 2-story addition, 16x18 feet, slag roof.

Store and Hotel, Fifteenth and Chestnut sts., \$650. Colonade Hotel (O), Fifteenth and Chestnut street. Basch & Co. (C), 1426 S. Front street. Flush bulk and marble work.

Dwelling, Fifty-eighth and City line, \$2,000. Chas. P. Vaughan (O), 230 W. Susquehanna avenue. Alfred James (C), Bala, Pa. Brick, 2 stories, 17x16 feet, shingle roof and alterations.

Storage Building, Beach and Laurel streets, \$600. Watson Malone & Sons (O), on prem-

ises. Frank Aehuff (C), 1600 N. Front street.

Planning Mill, 1133 Beach street, \$400. S. B. Vrooman Co. (O), on premises. Frank Aehuff (C), 1600 N. Front street. Alterations and fireproofing.

Building, 1438 S. Eighth street, \$350. Chas. Weinstein (O), Fifth and McKean streets. J. Carlucci (C), 1030 Mifflin street. New front, 9 foot brick wall.

Dwellings, 1864-66 Brunner street, \$350. S. Kryszak (O), on premises. Arthur Siemien-ski (C), 1634 Ruffner street. Alterations.

Store, 114 S. Fifteenth street, \$900. Colanade Hotel (O), Fifteenth and Chestnut sts. H. R. Rust (C), 19 S. Eighth street. Alterations to bulk window.

Office, Fifth and Walnut streets, \$1,890. Stokes, Packard, Haughton & Smith (O), on premises. J. Morris Daniels (C), 252 S. Juniper street. Alterations, install terrazo floors.

Store and Hall, 5615 Germantown avenue, \$865. C. A. Rowell (O), on premises. H. P. Werner (C), 3245 Germantown avenue. Alterations.

Store, 506 South street, \$600. B. Rosenweig (O), on premises. N. Sklar (C), 628 Pine st. New flush bulk and alterations.

Dwelling, Berks and Gaul streets, \$690. Rev. R. Scholz (O), 1504 E. Susquehanna avenue. Phila. Steam Htg. Co. (C), 1315 Cherry st. Steam heating system.

Dwelling, 706-08 N. Twenty-third street, \$800. Sam Betterman (O and C), 2347 Fairmount avenue. Alterations.

Garage, 419-21 Carpenter street, \$4,000. S. Ladenson & Son (O and C), on premises. Brick, 1 story, 35x92 feet, slag roof.

Store and Dwelling, 5538 N. Fifth street, \$550. Herman Hillinger (O), 2337 N. Seventh street. Herman Zingarf (C), 2527 N. Seventh street. Alterations.

Dwelling, 1602 Master street, \$640. E. E. Brode (O), 3100 N. Broad street. M. S. Kirschner (C), 421 Snyder avenue. Alterations to windows and metal canopy in front over step.

Store and Dwelling, 6127 Market street, \$1,347. J. G. Leiper, Jr. (O), Meadowbrook, Chestnut Hill. Jas. A. Fitzgeralds Sons (C), 1023 Snyder avenue. Repair fire damage.

Store and Dwelling, 2713-15-17-21-23-25 Kensington avenue, \$7,800. Chas. F. Eggleston (O), 1005 Bailey Building. D. Goldstein (C), 353 Ritner street. Alterations and repairs.

Dwelling, 29 W. Johnson street, \$1,500. E. H. Geselick (O), 79 W. Johnson street. Standard Const. Co. (C), 1713 Samson street.

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

Store and Dwelling, 2128 W. Toronto st., \$1,000. Matteo Mazza (O and C), on premises. Brick, 2 stories, 14x28 feet, slag roof.

Boiler House, Torresdale and "E" streets, \$1,800. Louis Walther Mfg. Co. (O), on premises. Geo. H. Thirk (C), 1919 W. Berks street. Brick, 1 story, 41x41 feet, slag roof.

Store and Dwelling, Seventeenth and Brown streets, \$450. Geo. T. Taylor (O), as above. S. J. Rea & Son (C), 1608 Fairmount avenue. Two new flush bulks.

Garage, 122 East Wallace avenue (rear), \$800. J. Hunsberger (O), as above. Philip Halback Cont. Co. (C), 1261 North Twenty-sixth street. Brick, 1 story, 18x23 feet, slag roof, cement floor.

Store and Dwelling, 4207 Main street, \$900. John Quigley (O), 1610 North Eighteenth street. B. Zodochoff (C), 2014 South Eighth street. Alterations.

Storage and Crane Runway, 1832-33 North Ninth street, \$10,000. Montgomery Iron & Steel Co. (O), as above. Sam'l Frank (C), as above. Iron on iron, 1 story, 100x140 feet, corrugated iron roof.

Dwelling, 1851 East Wensley street, \$300. Chas Lee (O), as above. W. A. Bottoms (C), 3314 J street. Brick, 1 story, 10x10 feet, slag roof.

WHAT THE CHINESE USE FOR ROOFS.

There is no such thing as a slate roof in China, for the simple reason that slates are not to be found, so it has come about that the Celestials have adopted tiles for roofing their houses. These, however, are beyond the means of the poorer classes, who have to rely upon the more insecure form afforded by straw or reeds. The very lowest strata of the population are even debarred from this and have to fall back on any scraps of material that come to hand. Such oddments as wooden boxes, old tarpaulins, old tin plates previously used for advertisements, sods of grass, reeds and cardboard have even been known to be used by the slum dwellers.

The tiles used in the construction of houses of the better class are open to considerable improvement, and would be regarded with no small degree of wonderment in civilized countries, says a writer in the "State Trades Gazette." Their color is black and their texture exceedingly coarse. The surface is rough and gritty and capable of inflicting scratches if scraped heavily by the fingers. The main essential of an effective roof covering is its incapacity to absorb moisture, and this quality is entirely missing in the Chinese tile.

With an alleged civilization considerably antedating the Christian era, one would have expected the art of building to have made more progress than it has done. If only in the method of laying tiles the crudeness of the methods still in vogue is exposed. These are not fixed and are simply held in position by the weight of the superincumbent ones. It is necessary for them, therefore, to have a considerable overlap. This amounts generally to three-quarters of the lower slate. What happens when the tiles become water-logged can readily be imagined. The weight becomes excessive, and when a heavy downpour sets in,

the strain on the under-structure is often more than it can withstand. Then there is another danger. China is the land of typhoons, and if one of the storms penetrates under the roofs, it may readily be imagined it causes no small havoc. The inhabitants frequently use the roofs as points of vantage or for cooling themselves when it is oppressively hot under cover, and for these and other reasons the roofs seldom look neat or symmetrical.

The tiles are curved and are laid in rows with the concave side uppermost. Between the rows are gutters, and fringing the bottom row are varied designs of flowers, gods, goddesses, etc.—"Architect and Engineer."

OUR WAR HOSPITALS IN FRANCE.

By Edward F. Stevens.

The time has come when our United States troops are taking their places on the firing line, in the trenches and in the various activities at the front; and the Nation's thought centers on the transportation, the housing and the feeding of these men in the vigor of their health and strength and growing manhood and on the providing of munitions and equipment for aggressive warfare. We forget, for the moment, that with victory comes also terrible suffering from the injuries and sickness caused by this winning of victory, and that proper and adequate housing and provision for all emergencies must be provided. We cannot, however, take the view of the good lady of a children's hospital committee who, when the plans for a new hospital were being considered and when the architect was discussing the location of the operating room and the morgue, said: "Why, these children mustn't be operated upon, and they are not going to die." We must have adequate facilities for expert care of our injured soldiers, for every soldier returned to the trenches adds to the fighting power of the army by just that much, and every day that can be gained in early convalescence adds toward victory.

When we consider what our two allies, England and France, have already provided in hospitals, we realize what we must do. In the spring of 1916 France had six hundred thousand beds and England five hundred and fifty thousand beds in field, base, private and public hospitals, for the army alone. The statistics go to show that there are twenty-five per cent. of casualties and sickness needing hospital care; so it is easy to see what we shall need in our hospital divisions. How is our Government meeting this demand? Hospital unit after hospital unit is being sent over; the best surgeons, medical specialists, and nurses of our land are offering their services and are going to the front. The Government must provide proper housing, wards, operating rooms, laboratories and equipment for accomplishing the necessary work; much material must be shipped from this country, not only the portable equipment, but many of the buildings themselves, so that upon arrival the erec-

tion can be accomplished with the minimum amount of labor.

The planning of these hospital buildings was placed in the hands of Mr. Charles Butler and the writer by the General Engineer Depot, U. S. Army, of which Lieutenant Colonel W. H. Rose is the head, and the plans have been approved by the office of the Surgeon General, U. S. Army. A brief description follows:

These units consist of eighty-seven buildings each, and comprise all the essential departments of an up-to-date hospital, all of "demountable" portable construction. The type of construction used is similar to that employed by Mr. Butler for the Rockefeller Demonstration Hospital in New York.

The layout on the ground must depend on the available site, on the contour of the land, on the local surroundings, etc. The orientation of certain buildings must always be considered in every hospital group; thus, to obtain the ideal lighting of the ward buildings the wards should run north-south, and the ideal condition for operating buildings is to have the operating rooms face the north, and the aim should always be to approximate this.

In the war hospital, especially in one near the front, greater facilities must be made for the reception of the patients; thus, the Receiving Building will accommodate a large number of stretchers at one time, and will allow for proper segregation and classification of the patients, the taking of the histories, etc. The bathing room adjoining is provided with high slab tubs. In this room the patient's clothes and effects are removed, which, after washing and fumigating, are deposited in the adjoining Patients' Effects Building.

As all buildings are connected by enclosed corridors, the patient can be taken, by stretcher or otherwise, to the operating building or to the ward, according to his condition.

The Operating Buildings, two in number, for the general operating service, consist of thoroughly equipped suites of rooms with every convenience of a modern operating unit in a surgical hospital. The rectangular shaped building, made necessary by the type of construction adopted, does not interfere with the efficiency of the plan except, perhaps, that there is a superabundance of corridor. The operating rooms are provided with abundant light, by means of both windows and skylights. Between the two main operating rooms is the sterilizing room, and sterile water is brought to the scrub-up sinks in each operating room. The scrub-up sinks, while they are simple enameled sinks, are provided with the most approved elbow-action scrub-up devices. Steam sterilizers and blanket warmers, a complete X-ray suite, a plaster room and general utility are all provided.

For the units placed near the front, two buildings would be needed, providing for ten operating tables.

The walls of the operating rooms are rendered smooth by an additional surface of en-

ameled canvas, while the floors are cement.

A separate operating and treatment building is provided for the ear, nose and throat, another for the eye, and another for the dental and laboratory work.

The Ward Building, of which there are thirty-two in each unit, is much the same as that adopted by the French and English army. It consists of the ward of thirty-two beds and of a twenty-foot airing balcony at the south end. The ward itself is 22 feet wide, 102 feet long, and has twenty-four windows. These windows, occupying about thirty per cent. of the wall surface and opening from the top, afford the maximum of light and air.

In each ward there are six emergency exits. The side wall panels, hinged at bottom and opening out, form a ramp, down which the beds can be run in case of fire or other cause for quick exit. The walls, doors and roofs being double, these ward buildings are comfortable both winter and summer.

The utilities consist of a linen room, a nurses' office, a toilet room, a surgical dressing room, a small serving kitchen, a small office for the military attendant, and an isolation room for a delirious or moribund patient.

In each group there are three Isolation Buildings for the care of communicable or contagious diseases. These provide for twenty-six patients each, and are planned on the so-called "Pasteur" or single room system. The ten single or isolation rooms are entered from the outside. Each room is self-contained, having a water closet and a sink with special elbow faucets, so that it will not be necessary for a patient to leave the room until he is convalescent. The service of food and attendance to the patient are from the inside corridor. Provision is made for linen, serving kitchen, utility room and discharge bath. The discharge bath is approached from the outside as well as from the inside. For convenience in bathing, a portable "slab" bath, which can be wheeled into any room, is provided, with water served from the sink and drained into the water closet bowl. The attendant can readily give the bath, clean the slab, and it will then be ready for the next patient.

There are two convalescent wards in each building.

For the care of the psychopathic and neurologic patient, two buildings, called the Neuro-Psychiatric Wards, are provided. The more violent cases are confined in the portion set apart for them, consisting of isolation rooms, a day room, and a room with continuous-flow baths. This portion of the building is protected by wire guards to prevent the escape of patients. The milder cases of insanity are cared for in a different section of the building.

The building for the strictly neurological cases provides special bath and medical treatment rooms, as well as wards, day room and rest rooms.

For sick officers, two Officers' Ward Build-

ings are provided, one with wards and semi-private room, and one with private rooms and mess.

For the convalescent patients, about fifty per cent. of whom are ambulatory or walking patients, dining rooms or mess halls are planned; also, a central bath house. For recreation, the assembly hall or post exchange is provided.

So much for the buildings for the patients.

The administration and mechanical buildings occupy a most important part in each group.

In the Administration Building, of course, the offices for administration, and they are much the same as in a civilian hospital. Headquarters for the commanding officer, secretaries, matron and pharmacist are provided, as well as postal and telegraph offices.

The commanding officer and chief surgeon are given a small house; the other officers are in a separate building. The female nurses have separate buildings, with single rooms for each nurse. Hospital barracks house the enlisted men.

The Kitchen Building is worked out with great care, and contains the bakery, the bread room, the main kitchen and the scullery; also a complete ice plant for cooling refrigerators in this building and for the making of ice for the hospital. High pressure steam is used largely for cooking, and this is obtained from a near-by boiler plant.

The dish washing is accomplished in a small building, situated between the kitchen and mess halls; this building serving as well for the housing of the food carts.

The process of serving food is simple; the orderly starting with his food cart first obtains his quota of hot dishes; then goes through the closed corridors to the kitchen, where he first picks up the bread required; next to the hot table to get the hot food, then for the dessert, and then through a closed corridor to the ward, where the food cart is used as a serving table, and the patient is reasonably sure of getting hot food.

The Laundry Building has been planned in reference to efficient work. The soiled clothes are entirely at one end, where, with modern machinery, they are sterilized, washed, dried, ironed, and folded, and then taken to a general storage room for distribution.

The construction of these buildings is simple—all of one story, built up of standard five-foot units. Notwithstanding that they will be of portable construction, with double walls, floors, and roofs, built in shops, transported to the war section and erected, they will be hygienic, easily cleaned, comfortable in winter and summer, and painted both inside and outside. Connections to these buildings are through enclosed corridors. The general appearance of the interior will be like the Rockefeller.

The construction of the trusses is worthy of special study. The utilizing of available

material, like the gusset plates at the junction of wall and roof and the section of channel iron in place of the usual turn buckle; the simplicity of erection; and the general pleasing appearance in the wards will be noted. The standard valve, which will be used on all sinks, bowls, and slop hoppers, is adapted for the surgeons' scrub-up with elbow valves and spray head, for bathing slabs with hose extension, and for general sinks throughout.

The heating system is so laid out with several small heating plants, that no large pipes will be required; in fact, a 3-inch pipe is the largest used outside the boiler houses.—"Architectural Record."

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggio give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

To be poor in a wealthy country, to be sick in a good climate, to be inefficient among a progressive people, is a sign of unwise educational methods. Such people were not taught to battle with the world or meet life's emergencies.—Thoreau.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

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126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

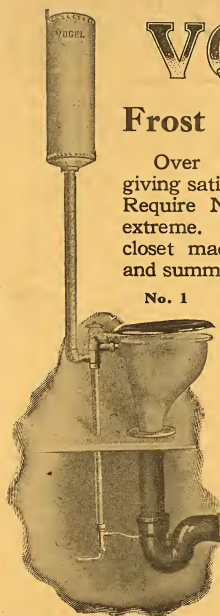
TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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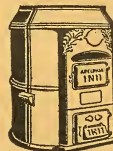
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April 24, 1918

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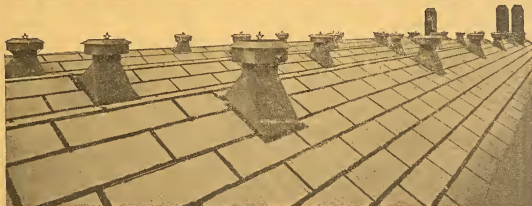
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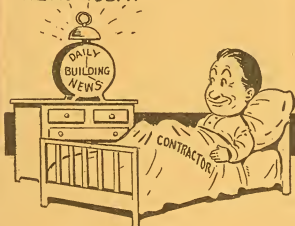
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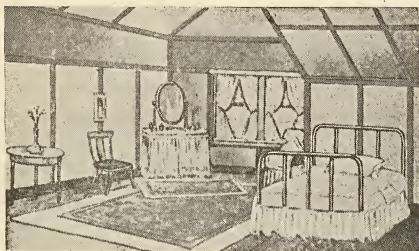
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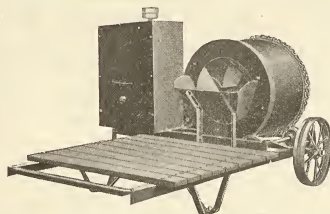
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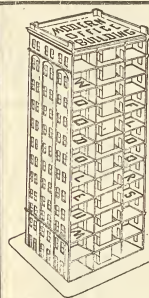
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Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 17

PHILADELPHIA
April 24, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record

and Builders' Guide

PUBLISHED WEEKLY

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As The Editor Sees It



THE need for better industrial housing conditions in America has at last culminated in the "Government's Standards for War Housing of Permanent Construction."

Up to the 'present time industrial housing development has been undertaken by various manufacturing concerns, but so far the Government has not deemed it wise to follow the example of Great Britain and other countries, an account of whose attainments in the direction of proper housing facilities was given in a recent issue of THE GUIDE.

War, however, has augmented the importance of the workingman, and the Government has been forced to realize that in its aim for the greatest efficiency possible, housing conditions of workers play a very great part.

To make financial preparation for this great project, two bills were introduced in Congress in February, each one appropriating \$50,000,000, to be expended for housing workmen in shipyards and in other war industries.

The work of planning the houses for the Government has been undertaken by Otto M. Eidlitz, the well-known New York builder, who, as Housing Administrator, has been working with his committee of architects and city planners, to accomplish the best possible results for the Government and the people.

The effects of this movement, which is the result of the exigencies of war, will reach far beyond the needs of the

present hour, for these houses are to be planned not as temporary structures, but as permanent dwellings, and with the view of meeting the needs, physical, mental and moral, of the war worker of to-day and the industrial worker of to-morrow.

That consideration has been given to every side of the question, that the workingman has been considered as a human being, with the same pride in his home that other normal human beings have; that his home is to mean to him a place not only of proper sanitation and ventilation, but of attractive comfort as well, is best shown by a perusal of the Standards as adopted by the Government, which we therefore print in full.

TEXT OF THE GOVERNMENT'S STANDARDS FOR WAR HOUSING OF PERMANENT CONSTRUCTION.

These standards are not intended as inflexible requirements, but any plans which fail to conform to them are not likely to be accepted unless supported by very strong reasons. Local building codes, housing laws, and similar ordinances are to be followed except where they permit lower standards than here-in set forth.

I. TYPES OF HOUSES (Principal types only).

- Type 1. Single-family house.
- Type 2. Two-family house.
- Type 3. Single-family house with rooms for lodgers or boarders.

- Type 4. Lodging house for men.
- Type 5. Hotel for men.
- Type 6. Lodging house for women.
- Type 7. Hotel for women.
- Type 8. Tenement house.
- Type 9. Boarding house.

GENERAL PROVISIONS.

All types of houses to conform to these general provisions and in addition to certain special provisions as later indicated.

1. *Arrangement.* Row or group houses normally not to be more than two rooms deep.

2. *Basements.* No living quarters to be in basements.

3. *Closets.* Every bedroom to have a clothes closet, opening from the room. Built-in wardrobe dressers will not be accepted. Normally such closet to be not less than 22 inches deep and with door. Closets to be supplied with rods to take coat hangers.

4. *Cooking.* Gas preferred, but flue for coal stove to be provided, all flues to be lined. The question of whether or not cook stoves are to be provided with the house to be considered at the time materials are being ordered.

5. *Fences.* Board fences will not be accepted. Hedges or open metal fences desirable. Suitable arrangements for drying clothes to be provided. Where there are open metal fences the fence standards can be designed for this purpose.

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6. *Furniture Space.* Beds to be indicated to scale on plans (double beds, 5 feet by 6 feet 6 inches; single beds, 3 feet by 6 feet 6 inches). Location of beds not to interfere with windows or doors. It is recommended that beds be free standing and not located in a corner or with the side against a wall. Space to be provided for two pieces of furniture in addition to bed. Halls, stairs, and doors to permit easy moving of furniture.

7. *Gardens.* Allotment gardens, conveniently accessible, preferable to increasing the size of the lot to provide for individual backyard vegetable gardens.

8. *Lighting.* Electricity preferred.

9. *Materials of Exterior.* Materials dependent on local supplies; brick, terra cotta, stone, or concrete preferred. Outer walls to be insulated against dampness and condensation. Rat noggling to be provided. Roof to be fire resistive; leaders and gutters not essential unless drip will do harm.

10. *Open Spaces.* Side-yard space between adjacent buildings to be preferably 20 feet; minimum, 16 feet; such space to be increased proportionately for each additional story, or part of story, above two stories. If this space is not obtainable because of lot sizes or land values, houses should be built in rows or groups.

Rear-yard depth not to be less than height of building, nor in any case less than 20 feet. Minimum distance between backs of houses to be 50 feet. Layout should contemplate future location of garages, which, when not an integral part of the house, should preferably be at the rear of the lot, should not be located closer than 15 feet to the nearest part of house, and should not exceed one story in height.

Front yards of setbacks desirable where practicable; minimum distance from front wall of house to front wall of opposite house to be 50 feet.

11. *Plumbing.* House drain under house and 5 feet outside to be extra heavy cast iron. It is recommended that soil and waste pipes be extra heavy cast iron or genuine wrought iron through roof. A 3-inch soil stack preferred where not more than two water-closets are placed on one stack.

Water-closets to be porcelain and wash-down, siphon, or siphon-jet type, with individual flush tank. Open-front seat recommended. Outdoor water-closets will not be accepted. Privies will not be accepted. Cellar water-closets not permitted except where supplementary to accommodations herein required.

Access to water-closet compartments to be from hall or vestibule, never sole-

ly from a room. Plunger, pan, long-hopper, and range closets will not be accepted.

Hot and cold water to be provided to all fixtures, with proper drains and shut-offs. Wooden sinks and wash trays will not be accepted.

All fixtures to be separately trapped except in batteries of wash trays and combined sink and wash tray, where one trap is sufficient.

Venting of traps to conform to approved practice, except that the back venting of the top or only fixture on a line is not required. Sink and lavatory traps to be connected direct to the vertical wastes, and not to floor branches. Exposed pipes preferred, and, when exposed, wrought iron preferred. Where possible, lines to be concentrated and kept from outside walls.

12. *Porches.* Desirable. To be of durable construction, particularly the foundations; to be restricted from encroaching on minimum side yard or unduly darkening rooms.

13. *Rear Entrances.* In the case of row or group houses there may be access to the rear through minor one-way public streets. Such streets to be not less than 12 feet wide; to be properly paved, curbed, drained and lighted. Private alleys will not be accepted.

14. *Roof Air Space.* In every house there shall be a minimum clear air space of 8 inches between the ceiling and the roof; this space to be provided with adequate waterproof openings for ventilation, at both ends if practicable.

15. *Rooms, Number of.* Bathrooms are not to be counted as rooms.

16. *Stairs.* Risers to be not more than 8 inches high and treads to be not less than 9 inches wide. Winding stairs will not be accepted except in types 1, 2 and 3. Not more than two winders will be allowed in series. Treads must measure at least 9 inches wide 18 inches from rails.

17. *Ventilation.* Every room to have at least one window opening directly to the outer air. Two windows in each room generally preferred; one window sufficient in small bedrooms. Each room to have a window area of not less than 12 square feet.

Cross ventilation as direct as possible to be provided for all rooms through windows, transoms, or doors; communicating door recommended between bedrooms in row houses.

Every bathroom to have a window of not less than 6 square feet in area opening directly to the outer air.

Every water-closet compartment to have a window of not less than 4½ square feet in area opening directly to the outer air. A skylight in the roof, with an equal amount of glass area and

provided with adequate ventilators, will be accepted in lieu of such window, but skylights are not desirable.

18. *Windows.* Minimum area to be measured between stop beads. Window head to be as near ceiling as practicable. Windows may be double-hung, pivoted, or casement. If double hung, upper and lower sash to be the same size. In cities with soft-coal smoke nuisance, minimum area to be increased.

Window frames to be designed to accommodate screens and outside shutters. In cold climates, weather strips are recommended.

II. SPECIAL PROVISIONS FOR TYPES 1, 2, AND 3.

In addition to complying with all general provisions, types 1, 2, and 3 are to comply with the following provisions:

Type 1. Single-family house.

Type 2. Two-family house. ("Two-flatter," one family upstairs, one down. For "double house," see "Single-family house, semi-detached.")

Type 3. Single-family house with rooms for not more than three lodgers or boarders.

1. *Agreement.* Types 1 and 3 not to be over 2½ stories high. Type 2 not to be over 2 stories high.

When detached or semi-detached, types 1, 2, and 3 normally not to be over 3 rooms deep; when in rows or groups, not to be over 2 rooms deep except that the end house of row may be 3 rooms deep.

2. *Cellar.* To be well lighted, cross ventilated, dry, and paved or cemented. Minimum clear height under joists, 6 feet 6 inches. When hot-air furnaces are used, minimum height 7 feet. Cellar not essential under whole house. Where climatic or soil conditions make cellar inadvisable it may be omitted, in which case adequate provision is to be made for storing fuel. Where cellar is omitted, house to be set up on masonry piers or walls 2 feet clear from ground; space to be drained, inclosed, and ventilated.

3. *Grouping.* Single-family houses of the more expensive type preferably to be detached houses, but may be semi-detached or even attached in rows or groups. In other cases where land values permit, detached or semi-detached are desirable; otherwise attached in groups.

4. *Heating.* Provision to be made for heating houses. If not otherwise heated, bathroom to be heated from kitchen stove.

5. *Materials of Exterior.* Brick, terra cotta, stone, or concrete preferred; but wood frame clapboarded, shingled, or stuccoed permitted for detached or semi-detached houses not over 2½ stories

high. Party walls between attached houses in rows or groups to be of brick, terra cotta, stone, or concrete.

6. *Plumbing.* Bath tub (shower is not sufficient).

Lavatory, to be preferably in bathroom.

Sink to be in kitchen; rim, 36 inches above floor.

Washtubs with covers, preferably two, rim 36 inches above floor, to be set in kitchen or in well-lighted, dry, and ventilated cellar.

Water-closet to be inside the house in well-lighted and ventilated compartment, with window of $4\frac{1}{2}$ square feet minimum area to outer air, and preferably with impervious floor not of concrete.

7. *Rooms, Height of.* Minimum, 8 feet.

Sloping ceilings and "knee walls" will be accepted only under the following conditions. Roof space above flat portion of ceiling to be of ample size and adequately ventilated; spaces between rafters of sloping portion to be adequately ventilated into roof space; bedroom to have greater window area and better cross ventilation than the minimum permissible for a standard flat-ceiling room; bedroom to have a minimum height of 8 feet over an area of at least 40 square feet with a minimum flat-ceiling width of $3\frac{1}{2}$ feet, and a clear height of not less than 6 feet over an area of at least 80 square feet with a minimum width of 7 feet.

8. *Rooms in Attic.* As a rule, in $2\frac{1}{2}$ -story houses, only one bedroom to be provided in the attic.

8. *Rooms, Number and Use of.* In types 1 and 2: For higher-paid workers, five-room type preferred, with parlor, large kitchen, 3 bedrooms, and bathroom. Dining room and kitchenette may be provided in place of the large kitchen. Four-room type to be provided sparingly for higher-paid workers. Six-room type, with 4 bedrooms, or 3 bedrooms and parlor convertible into fourth bedroom, suited for abnormally large families only, and should be provided sparingly. Six-room type should normally have parlor, dining room, kitchen, 3 bedrooms, and bathroom.

For lower-paid workers, four-room type desirable, with parlor, kitchen, 2 bedrooms, and bathroom.

Any house having more than seven rooms to be treated as type 3.

In type 3, in addition to family quarters indicated above, single rooms for lodgers to be provided. In addition to the family water-closet accommodations, a water-closet compartment containing lavatory to be provided for the sole use of the lodgers. Lodgers to have access to their bedrooms and to

their water-closet compartment without going through rooms designed for use of family.

10. *Rooms, Size of.* One large bedroom to be provided, size 10 by 12 to 12 by 14 feet.

Small bedrooms, minimum size, 80 square feet; minimum width, 7 feet.

Parlor, 10 by 12 to 12 by 14 feet.

Dining room, 9 by 12 to 12 by 14 feet.

Kitchen (where there is no separate dining room), 10 by 12 to 12 by 14 feet.

Kitchenette (only where there is a separate dining room), minimum width, 6 feet; minimum area, 70 square feet.

III. SPECIAL PROVISIONS FOR TYPES 4 AND 5.

In addition to complying with all general provisions, types 4 and 5 must comply with the following special provisions:

Type 4. Lodging house for men.

Type 5. Hotel for men.

1. *Arrangement.* Provision to be made for 75 men or more. Height limited to 4 stories, except in large cities.

2. *Cellar.* Minimum height, 7 feet; to be well lighted, cross ventilated, dry, and paved or cemented. Cellar not essential under whole building. Where omitted, building to be set up on masonry piers or walls 2 feet clear from ground; space to be drained, inclosed and ventilated.

3. *Fire Protection.* If over four stories high to be fireproof throughout.

If over 3 stories high, first floor construction to be fireproof.

If over 2 stories high, non-fireproof building the area of which exceeds approximately 3,000 square feet to be divided by fire walls of brick, terra cotta, stone, or concrete into areas not exceeding approximately 3,000 square feet each. All openings in such walls to be provided with fireproof self-closing doors. Adequate means of egress to be provided to street or yard by an additional flight of stairs, or by fire tower or stair fire escape (fire escape less desirable). All such additional means of egress to be remote from the main stairs and separated therefrom and from the other parts of the building by walls of brick, terra cotta, stone, or concrete, with fireproof self-closing doors at all openings. Such additional means of egress to be so located that no room shall be more than 40 feet from a means of egress. All main egress doors to swing out.

All stairs and stair halls to be not less than 3 feet wide in the clear and to be inclosed in walls of brick, terra cotta, stone, or concrete, with fireproof self-closing doors at all openings. All doors

to stair halls to swing into stair hall without obstructing free passage.

Dumb-waiters and elevators will not be accepted in stair enclosure; they should be inclosed in fireproof shafts with fireproof doors, those for dumb-waiters to be self-closing. Inside cellar stairs to be inclosed with walls of brick, terra cotta, stone, or concrete, with self-closing fireproof doors. Stand-pipes with hose reels on each floor to be so located that any point can be reached with 75 feet of hose.

4. *Heating.* Except where connected with a central plant, provision to be made for independent heating.

5. *Material of Exterior.* To be brick, terra cotta, stone, or concrete, except that wood frame will be accepted for one-story buildings.

6. *Plumbing.* Minimum provision: One water-closet per 12 men; one urinal per 16 men; one lavatory per 8 men; one shower per 10 men; one bathtub per floor, provided there is not less than one per 50 men. Ratio to be increased where there are less than 50 men per floor. Floor and base of toilet rooms to be waterproof not of concrete. Sufficient water-closets to be provided in the cellar or basement for the accommodation of engineers, firemen and laundry workers.

7. *Rooms, Height of.* Height for public rooms, 9 to 12 feet; minimum for bedrooms, 8 feet.

8. *Rooms, Number and Use of.* Each lodger to have separate room. Two-men rooms not permitted. (Cubicles and dwarf partitions will not be accepted.)

Each floor to have a general bathroom containing required showers, tub, and lavatories. Each floor also to have a general toilet room containing required water-closets and urinals. Each of the two rooms to have windows opening directly to the outer air, and to be separate but adjoining and communicating. Service closets with slop sinks and space for brooms and pails to be provided on each floor.

Smoking room, reading room, billiard room, physician's room, laundry for washing clothes, superintendent's office and adequate quarters for superintendent to be provided. Unless provided elsewhere in the community, bowling alleys to be in basement.

Hotel (type 5) also to have dining room and cafeteria with outside access thereto, and with pantry, service rooms, kitchen and toilet facilities for men and women employees. An additional general toilet room is to be provided conveniently accessible.

9. *Rooms, Size of.* Single bedrooms to have an area of 70 square feet and be 7 feet wide minimum.

10. *Ventilation.* Bedroom doors preferably to be placed opposite each other and to have transoms or slat panels.

11. *Windows.* One window in each room to have a minimum area of 12 square feet between stop beads.

IV. SPECIAL PROVISIONS FOR TYPES 6 AND 7.

In addition to complying with all general provisions, types 6 and 7 must comply with the following special provisions:

Type 6. Lodging house for women.

Type 7. Hotel for women.

1. *Arrangement.* Provision to be made for 75 to 150 women (with less than 75 the unit is not economical; with more than 150 there are difficulties in management and supervision).

Height limited to 4 stories, except in large cities.

2. *Cellar.* Minimum height, 7 feet; to be well lighted, cross ventilated, dry, and paved or cemented. Cellar not essential under whole building. Where omitted, buildin gto be set upon masonry piers or walls 2 feet clear from ground; space to be drained, inclosed and ventilated.

3. *Fire Protection.* If over four stories high, to be fireproof throughout.

If over 3 stories high, first floor construction to be fireproof.

If over 2 stories high, a non-fireproof building the area of which exceeds approximately 3,000 square feet to be divided by fire walls of brick, terra cotta, stone, or concrete into areas not exceeding approximately 3,000 square feet. All openings in such walls to be provided with fireproof self-closing doors. Adequate means of egress to be provided to street or yard by an additional flight of stairs, or by fire tower or stair fire escape (fire escape less desirable). All such additional means of egress to be remote from the main stairs and separated therefrom and from other parts of the building by walls of brick, terra cotta, stone or concrete, with fireproof self-closing doors at all openings. Such additional means of egress to be so located that no room shall be more than 40 feet from a means of egress. All main egress doors to swing out.

All stairs an dstair halls to be not less than 3 feet wide in the clear and to be inclosed in walls of brick, terra cotta, stone, or concrete, with fireproof self-closing doors at all openings. All doors to stair halls to swing into stair hall without obstructing free passage.

Dumb-waiters and elevators will not be accepted in stair inclosure; they should be inclosed in fireproof shafts with fireproof doors, those for dumb-waiters to be self-closing. Inside cellar stairs to be inclosed with walls of

brick, terra cotta, stone, or concrete, with self-closing fireproof doors. Standpipes with hose reels on each floor to be so located that any point can be reached with 75 feet of hose.

4. *Heating.* Except where connected with a central heating plant, provision to be made for independent heating.

5. *Materials for Exterior.* To be of brick, terra cotta, stone, or concrete, except that wood frame will be accepted for one-story buildings.

6. *Plumbing.* Minimum provision: One water-closet per 10 women, one lavatory per 6 women, one body shower per 10 women, one bathtub per 25 women. Ratio to be increased where there are less than 50 women per floor. Floor and base of toilet rooms waterproof, not of concrete. Dwarf partitions between lavatories to extend at least 6 feet above the floor and have curtains. Sufficient water-closets to be provided in the cellar or basement for the accommodation of engineers, firemen, and laundry workers.

7. *Rooms, Height of.* Height for public rooms, 9 to 12 feet; minimum for bedrooms, 8 feet.

8. *Rooms, Number and Use of.* Each lodger to have separate rooms. (Cubicles and dwarf partitions will not be accepted.) Rooms for two women not permitted. Each floor to have a general bathroom containing required body showers, tub, and lavatories. Each floor also to have a general toilet room containing required water-closets. Each of these two rooms to have windows opening directly to the outer air, and to be separate but adjoining and communicating. Service closet, with slop sink and space for brooms and pails to be provided on each floor.

First floor to have matron's office so placed as to oversee the single entrance and access to sleeping quarters; to have reception parlors or alcoves (one for every 20 women), or large parlor with furniture arranged for privacy in conversation; also assembly hall with movable partitions and set stage.

Kitchenette, sitting room, and sewing room to be provided on at least alternate room floors. Matron's quarters, physician's room, and infirmary, laundry in which lodgers can wash their clothes, and trunk room to be provided.

Hotel (type 7) also to have dining room and cafeteria, with outside access thereto, with pantry, service rooms, kitchen and toilet facilities for employees. An additional toilet room is to be provided conveniently accessible.

9. *Rooms, Size of.* Single bedrooms to have an area of 70 square feet and be 7 feet wide minimum.

10. *Ventilation.* Bedroom doors preferably to be placed opposite each

other, and to have transoms or slat panels.

11. *Windows.* One window in each room to have minimum area of 12 square feet between stop beads.

V. SPECIAL PROVISIONS FOR TYPE 8.

Type 8. Tenement house (including flats or apartments), a building occupied in whole or in part by three or more families.

Tenement and apartment houses are considered generally undesirable and will be accepted only in cities where, because of high land values, it is clearly demonstrated that single and two-family houses cannot be economically provided, or where there is insistent local demand for this type of multiple housing. In any case, they will be accepted only where the Bureau of Industrial Housing and Transportation is convinced that local conditions require or justify their use. They must conform in general to local building ordinances, to the general provisions of these standards and to other special provisions to be issued by the Bureau of Industrial Housing and Transportation.

1. *Arrangement.* Buildings are not to be more than 2 rooms deep. This means either that rooms shall open on a street or on a rear yard, or on an interior park sufficiently large for grass and trees to grow in it and of a sufficient size to admit direct sunshine into all rooms opening on it, at some period of the day, except rooms with northerly exposure. Buildings not to be over four stories high.

2. *Cellar.* To be under whole building, minimum height, 7 feet; to be well lighted, cross ventilated, and paved.

3. *Fireproofing.* If over 3 stories high, to be fire-resistive throughout; if over 2 stories high, a non-fireproof building, the area of which exceeds 3,000 square feet, to be divided by fire walls of brick, terra cotta, stone or concrete into area not exceeding approximately 3,000 square feet each. All openings in such walls to be provided with fireproof self-closing doors.

Adequate means of egress to be provided or yard by additional stairs, or by fire tower or stair fire escape (fire escape less desirable). All such additional means of egress to be remote from the main stairs and separated therefrom and from the other parts of the building by walls of brick, terra cotta, stone or concrete, with fireproof self-closing doors at all openings.

All stairs and stair halls to be fireproof and inclosed in walls of brick, terra cotta, stone or concrete, with fireproof self-closing doors at all openings.

Dumb-waiters and elevators will not be accepted in stair inclosure; they should be inclosed in fireproof shafts

with fireproof doors, those of dumb-waiter to be self-inclosing. Inside cellar stairs to be inclosed with walls of brick, terra cotta, stone or concrete with self-closing fireproof doors.

In a flat-roofed, non fireproof tenement house containing more than 4 families, all stairs to extend to the roof, and to be provided with a bulkhead. If 4 families or less, scuttle with ladder is sufficient.

4. *Heating.* Normally central system.

5. *Material of Walls.* Walls to be of brick, terra cotta, stone or concrete.

6. *Plumbing.* Each apartment to be provided in the kitchen with set wash-tubs with covers, preferably two, rim 36 inches above floor.

Sink to be in kitchen, rim 36 inches above floor.

Water closet to be in well-lighted and ventilated compartment with window of $4\frac{1}{2}$ square feet minimum area to outer air, and with impervious floor, not concrete.

Bathtub (shower is not sufficient).

Lavatory, preferably to be in bathroom.

Sufficient additional water closets to be provided in the cellar or basement for the accommodation of engineer.

7. *Rooms—Height of.* Minimum height 9 feet in the clear.

8. *Rooms—Number and Use of.* For higher-paid workers, five-room type preferred with parlor, large kitchen, 3 bedrooms and bathroom. Dining room and kitchenette may be provided in place of large kitchen. Four-room type to be provided sparingly for higher-paid workers. Six-room type, with 4 bedrooms, or 3 bedrooms and parlor convertible into fourth bedroom, suited for abnormally large families only, and should be provided sparingly; six-room type should normally have parlor, dining room, kitchen, 3 bedrooms and bathroom.

For lower-paid workers, four-room type desirable, with parlor, kitchen, 2 bedrooms, and bathroom. A few three-room tenements may be provided.

One-room and two-room apartments will not be accepted.

No apartment of over six rooms accepted.

9. *Rooms—Size of.* One large bedroom to be provided, size 9x11 to 12x14 feet.

Small bedrooms, minimum size 80 square feet; minimum width 7 feet.

Parlor, 10x12 to 12x14 feet.

Dining room, 9x11 to 12x14 feet.

Kitchen (where there is no separate dining room), 10x12 to 12x14 feet.

Kitchenette (only where there is a separate dining room), minimum width 6 feet; normal minimum area 70 square feet.

10. *Windows.* Each room to have at

least one window opening directly to the outer air, to be not less than 12 square feet in area between stop beads. Each public hall and stair hall to have window with minimum area of 12 square feet, opening directly to the outer air, at each story.

VI. SPECIAL PROVISIONS FOR TYPE 9 (Boarding House).

Where more than 3 and less than 25 rooms for lodgers are provided, building to be classed as boarding house. If 3 lodgers or less, building to be classed as Type 3; if 25 or more, to be classed as Types 4, 5, 6 or 7.

In addition to complying with all general provisions, buildings of type 9 must comply with the following special provisions:

1. *Access.* Lodgers to have access to their bedrooms and to their watercloset compartments and bathrooms without going through rooms designed for use of family. Separate outside entrance for lodgers recommended.

2. *Arrangement.* Not to be over 3 stories high. Not to be over 2 rooms deep, except that the end houses of rows may be 3 rooms deep.

3. *Cellar.* To be well lighted, cross-ventilated, dry and paved or cemented. Minimum clear height under joists 7 feet. Cellar not essential under the whole house; where omitted, house to be set up on masonry piers or walls 2 feet clear from ground; space to be drained, inclosed and ventilated.

4. *Fire Protection.* If frame, not to be over 2 stories high. If over 2 stories high, adequate means of egress to be provided to street or yard by an additional flight of stairs, or by fire tower or stair fire escape (fire escape less desirable). All such additional means of egress to be remote from the main stairs and separated therefrom and from the other parts of the building by walls of brick, terra cotta, stone or concrete, with fireproof, self-closing doors at all openings. Such additional means of egress to be so located that no room shall be more than 40 feet from a means of egress.

All stairs and stair halls to be not less than 3 feet wide in the clear and to be inclosed in walls of brick, terra cotta, stone or concrete with fireproof self-closing doors at all openings.

Dumb-waiters and elevators will not be accepted in stair inclosure; they should be inclosed in fireproof shafts with fireproof doors, those for dumb-waiters to be self-closing.

5. *Heating.* Except where connected with a central plant, provision to be made for independent heating.

6. *Materials of Walls.* Brick, terra cotta, stone or concrete preferred, but wood frame, clapboarded, shingled or

stuccoed permitted for detached or semi-detached houses not over 2 stories high.

7. *Plumbing.* For family living quarters:

Bathtub (shower is not sufficient).

Lavatory, to be preferably in bathroom.

Sink to be in kitchen; rim 36 inches above floor.

Washtubs with covers, preferably two, rim 36 inches above floor, to be set in kitchen or in well-lighted, dry, and ventilated cellar.

Water-closet to be inside the house in well-lighted and ventilated compartment, with window of $4\frac{1}{2}$ square feet minimum area to outer air, and preferably with impervious floor not of concrete.

A watercloset compartment containing lavatory to be provided for the sole use of the lodgers. The following minimum provisions to be made: For men, 1 bathtub per 24 lodgers, 1 water closet and 1 lavatory per 8 lodgers, 1 shower per 10 lodgers; for women, 1 bathtub per 16 lodgers, 1 body shower per 10 lodgers, 1 lavatory per 5 lodgers, 1 water closet per 8 lodgers. Dwarf partition between lavatories for women to extend at least 6 feet above the floor and have curtains.

In addition to above, floor and base of toilet rooms to be waterproof not of concrete.

8. *Rooms, Height of.* Minimum 8 feet.

9. *Rooms in Attic.* No lodgers' rooms in attic accepted.

10. *Rooms, Number and Use of.* Each lodger to have separate room. Rooms for two lodgers not permitted. (Cubicles and dwarf partitions will not be accepted). Building to contain more than 3 and less than 25 rooms for lodgers, in addition to living quarters for one family, lodgers' bath rooms and toilet rooms containing showers, tubs, lavatories, waterclosets to be provided; preferably, bath room containing showers, tub, and lavatories to be separate but adjoining and communicating with water closet compartment. One of each such rooms preferably on each floor. Each of these two rooms to have windows opening directly to the outer air. Lodgers to have a common room, also dining room; the latter to be located near family kitchen; the common room to be conveniently accessible from the outside.

11. *Rooms, Size of.* Single bedrooms for lodgers to have an area of 70 square feet and be 7 feet wide minimum. Size of common room and dining room each to be proportionate to the number of boarders.

12. *Ventilation.* Bedroom doors preferably to be placed opposite each other and to have transoms or slat panels.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED; ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Stores and Apartments, 1213-15 East Chelton avenue, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, S. Goldfarb, 1201 East Chelton avenue, Philadelphia. Brick, 2 stories and basement, 40x60 feet, slag roof, maple floors, steam heating, electric lighting, tile work, hollow metal skylights, flush bulks, metal ceilings. Plans in progress. Architect will take bids in ten days.

Sales and Service Building, 1641-43 North Broad street, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Kahn & Greenberg, Morris Building, Philadelphia. Brick, 2 stories and 1 story, 165x64 feet. Outlet on Park avenue, 16x75 feet, slag roof, electric lighting, steam heating, hollow metal skylights, metal lath, cement floors. Architects and owners are taking sub-bids.

Synagogue, 324-26 Fitzwater street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, name withheld. Brick and stone, 3 stories, 24x137 feet, slag roof, steam heating, electric lighting, tile and marble work, cement work, hardwood floors, leaded glass, metal ceilings. Plans in progress. Architect will take bids in two weeks.

Warehouse, Thirtieth and Chestnut sts., Philadelphia. Architects, Pouckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Schuykill Warehouse Co., on premises. Reinforced concrete, brick and stone, 2 stories and basement, 80x79 feet, slag roof, cement floors, rolled steel sash and skylights, fire doors, ornamental iron work, safety trends, waterproofing (heating, plumbing lighting, sprinklers, reserved). Architects taking bids due April 24th. Frank G. Stewart, 1619 Sansom st., Warren-Moore Co., Colonial Trust Bldg., John N. Gill & Co., Otis Bldg., Barclay White Co., 1713 Sansom street, H. E. Baton, 1713 Sansom street, and Monaghan & Loose, Inc., 3016 Chestnut street, are figuring.

Bank (add.), Broad and Erie avenue, Philadelphia. Architect, Philip Merz, Pennsylvania Building, Philadelphia. Owners, North Philadelphia Trust Co., on premises. Brick, stone and concrete. Plans in progress. Too early for details.

Caretakers Lodge House, Bartram Gardens, Philadelphia. Architect, Joseph A. Koletter, City Hall, Philadelphia. Owner, City of Philadelphia, Department of Public Work, City Hall. Brick, 2 stories, 28x30 feet, slate roof, hot air heating, electric lighting, yellow pine floors. Owners have received bids.

Twin Residences (20 prs.), South Side of Sansom street, between 46th and 47th.

Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, N. Raidman, 4737 Sansom street, Philadelphia. Brick, 2 stories, 22x70 feet, slag roof, stone foundations, garage with each house, concrete foundation and cement floor, hot water heating, electric lighting, tile and marble work, parquet and tile floors, hollow metal skylights, leaded glass, plumbing, painting, plastering. Plans about completed. Owner will take sub-bids in one week.

Factories (2) and Garage, Philadelphia. Architect, Herman Miller, Crozer Building, Philadelphia. Owner, name withheld. Factories, 4 and 6 stories, brick, slow burning construction, garage, concrete, 2 stories. Plans in progress. Architect will be ready for bids in three weeks. Too early for details.

Garage, Fifteenth and Columbia avenue, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, name withheld. Brick, 1 story, 23x80 feet, slag roof, stone foundations, cement floors, electric lighting. Architect is taking sub-bids.

Factory, Erie avenue and Richmond street, Philadelphia. Architect, Frederick Webber, Morris Bldg. Owner, name withheld. Reinforced concrete and brick, 2 stories, 34x99 feet, slag roof, stone foundations, plank and pine floors, rolled steel and hollow metal sash, hollow metal skylights, iron stairs, ornamental iron work, roof ventilators, wire work. Architect has received bids.

Store Building and Rooming House, 1306-08-10 South 8 street, Philadelphia. Architect, Herman H. Kline Sixth and Mifflin streets, Philadelphia. Owner, M. Cohen, 1206 South street, Philadelphia. Brick, stone and steel, stone foundations, 3 stories, 42x120 feet, slag roof, steam heating, electric lighting, yellow pine floors, cement work, hollow metal skylights, fire doors, fire tower, flush bulks. Architect is taking sub-bids.

Power House and Coal Pocket, Tulip and Somerset streets, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia & Reading Railroad Co., Twelfth and Market streets, Philadelphia. Brick, reinforced concrete and terra cotta, 1 story and basement, 48x77 feet and 42x22 feet, asbestos roof, cement and brick floors, rolled steel sash, hollow metal doors, iron stairs, roof ventilators, waterproofing, ornamental iron work. Owners have received bids.

Office and Undertaking Building (alt. and add.), 1927-29 North Broad street, Philadelphia. Architects, Price & McLanahan, Bellevue Court Building, Philadelphia.

Owner, Schuyler Armstrong, on premises. Reinforced concrete, brick and stucco, 3 stories, 40x80 feet, slag and tin roof, stone foundations, steam heating, electric lighting, tile and marble work, rolled steel sash, fire and kalamein doors, iron stairs, ornamental iron work, canvas and slate roof, cement and parquet floors, metal lath, wire work. Architects taking bids due April 25th. A. R. Raff Construction Co., 1635 Thompson street, Pomeroy Construction Co., 1609 Ranstead street, R. E. Grau, 1707 Sansom street, and Pringle Berthwick, 8018 Germantown avenue, are figuring.

Store (alts.), southwest corner Seventeenth and South streets, Philadelphia. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owner, Sternberg Bros., 1644 South street, Philadelphia. Consists of interior alterations, flush bulks, tile and marble work. Architects have received bids.

Convenience Station, Wm. Lanier Park, Twenty-ninth and Dickinson streets, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, Department of Public Works, City of Philadelphia, 113 City Hall. Brick, 1 story, 24x24 feet, slate roof, cement floor. Owners have received bids.

Naval Training Camp Extension, No. 2924, League Island, Philadelphia. Architect, private plans. Owners, United States Government, care Bureau of Yards and Docks, C. W. Parks, Chief, Washington, D. C. Frame, 1 and 2 stories, 32 buildings, various sizes, 3-ply ready roofs, yellow pine floors, steam heating, electric lighting, plumbing, painting, plastering, glazing and hardware, ornamental iron work. Owners taking bids due May 1st. Warren-Moore Co., Colonial Trust Bldg., and Thos. Reilly, 1616 Thompson street, Philadelphia, are figuring.

Injector Building (add.), Sixteenth and Hamilton streets, Philadelphia. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owner, Wm. Sellers & Co., Inc., Sixteenth and Hamilton streets, Philadelphia. Brick, concrete and terra cotta, 5 stories, 24x44 feet, slag roof, cement and maple floors, metal lath, rolled steel sash, fire doors (heating, lighting and plumbing, reserved). Architect taking bids due April 27th. H. H. Burrell, 206 South Quince st., James H. Wells, Otis Bldg., F. L. Hoover & Sons, 1023 Cherry street, E. E. Hollenback, Inc., 1804 Brandywine street, and Doyle & Co., 1519 Sansom street are figuring.

Residences (18), Sixty-first and Columbia avenue, Philadelphia. Architect, B. Allen Wilson, 1208 Chestnut street, Phila-

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delphia. Owner, Daniel E. Hogan, 6043 Columbia avenue, Philadelphia. Brick, 2 and 3 stories, 21x50 feet (garages in basement and rear), slag roofs, stone foundations, hot water heating, combination lighting, tile and marble work, hardwood floors, metal lath. Owner will take sub-bids in a week.

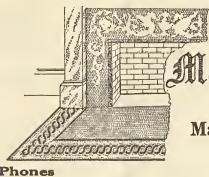
Ward Buildings (2) and Nurses' Quarters, No. 2946, Philadelphia, Pa. Architect, private plans. Owners, United States Government, Bureau of Yards and Docks, C. W. Parks, Chief, Navy Department, Washington, D. C. Plans in progress. Too early for details.

Store (1) and Residences (30), Hollywood and Norris streets and Myrtlewood and Sedgley avenue, Philadelphia. \$76,100. Architect, Frank J. Leske, 3261 Rige ave., Philadelphia. Owner, Geo. D. Nehm, 2736 Girard avenue. Brick, 2 stories, 15x38 ft., slag roof hot water heating, combination lighting, pine floors, flush bulks. Work about to be started.

Garage (1 or 2), 3107 Queen street and 3110 West Penn street. Architect, Samuel D. Hawley, Queen Lane Manor, Philadelphia. Owner, F. Kimball Hager, 3110 W. Penn street, Queen Lane Manor. Brick and stucco, 1 story, 12x19 feet, slate roof, cement floors, electric lighting (heating reserved), stone foundations. Architect has received bids.

Shop and Garage, Queen and Knox sts., Germantown. Architect, private plans. Owner, Alfred Brobson, 5012 Knox street, Philadelphia. Brick, slow burning, 2 stories, 18x51 feet, slag roof, cement floors, stone foundations (heating, lighting and gasoline storage system reserved). Owner taking bids due as soon as possible. Wm. C. Wright, 22 Harvey street, is figuring.

Residence (alts.), Upsal and Wayne ave., Germantown. Architect, H. Rex Stackhouse, 129 South Fifth st., Philadelphia. Owner, name withheld. Consists of interior alterations, hot water heating, elec-



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tric lighting, tile work. Architect will take bids in a few days.

Warehouse, 234-26 North Fifteenth street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, name withheld. Brick, 2 stories, 40x120 feet. Plans in progress.

Factory, Seventeenth and Cambria streets, Philadelphia. Architect, Chas. E. Oelschlagel, 1615 Walnut street. Owner, name withheld. Reinforced concrete, 4 stories, 175x230 feet, slag roof, reinforced concrete floors, steam heating, electric light, rolled steel sash and skylight, fire doors, (4) elevators, waterproofing, sprinklers. Architect taking bids, due April 26th. John R. Wiggins Co., Otis Building; Warren-Moore Co., Colonial Trust Building; Turner Concrete Steel Co., 1713 Sansom street, and F. A. Havens & Co., 845 North Nineteenth street, are figuring.

Shed, Fifteenth and Washington avenue, Philadelphia. Architect, private plans. Owner, U. S. Marine Corps, Q. M. Dept., 1100 South Broad street, Philadelphia. Concrete, brick and steel, 1 story, 94x136 feet, corrugated iron roof, cement floors, electric lighting, rolled steel sash, fire doors. Owners taking bids, due at 1100 South Broad street, April 27th, at 11 A. M. Metzger & Fisher, Otis Building; F. L. Hoover & Sons, 1023 Cherry street, and E. E. Hollenback, Inc., 1804 Brandywine street; Thos. C. Trafford, 1613 Sansom street; Hogg Const. Co., 1634 Sansom street; Wark-Yardley Co., 1737 Filbert street; Wills-Ludwick Co., 34 South Seventeenth street; Monaghan & Lasso, 3016 Chestnut street, and Conneen Const. Co., 1737 Filbert street, Philadelphia, are figuring.

Residences (200), Tacony, Philadelphia. \$3,000, approximately. Architect, private plans. Owner, name withheld. Brick and stucco, 2 stories, 26x16 feet, tin roof, stone foundations, warm air heating, elec-

tric lighting, pine floors, hollow tile. Pringle Borthwick, 8018 Germantown avenue, taking sub-bids, due April 25th.

Residence and Garage, Eleventh and Wingohocking streets, Philadelphia. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owner, Wax Weinroth, 308 Market street, Philadelphia. Stucco and hollow tile, 2½ stories, 40x51 feet, tile roof, concrete floors, hollow tile, metal lath (tile work, hardware, heating and lighting, reserved). Architect taking bids, due April 26th. H. E. Grau Co., 1707 Sansom street, and Pringle Borthwick, 8018 Germantown avenue, are figuring.

Garage, Twenty-first and Glenwood avenue, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner, R. A. Blank, care of architects. Brick, 1 story, 23x100 feet, slag roof, stone foundations, hot water heating, electric lighting, cement floors, hollow metal sash and skylights (gasoline storage system). Architects taking bids, due April 29th. W. O. Spring, 1624 Latimer street; Standard Const. Co., 1713 Sansom street; Metzger & Fisher, Otis Building; James H. Wells, Otis Building, and H. E. Grau Co., 1707 Sansom street, are figuring.

Garage, Wood street, west of Seventeenth street, Philadelphia. Architect, Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owner, J. Edw. Lutz, 240 North Seventeenth street, Philadelphia. Brick, 1 story, 45x84 feet, slag roof, cement floors, stone foundations, electric lighting, hollow metal skylights, heating, reserved). Architect taking bids, due April 29th. Smith-Hardien Co., 1606 Cherry street; Hogg Const. Co., 1634 Sansom street, and Thos. C. Trafford, 1613 Sansom street, are figuring.

The "Builders' Guide" is in its thirty-third year of continuous publication.

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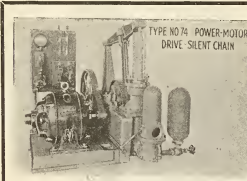
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Garage, Diamond and Marshall streets. Philadelphia. Architect, private plans. Owner, Geo. G. Melloy, 1419 Spring Garden street, Philadelphia. Brick, 1 story, slag roof, cement floors (heating, lighting and gasoline storage system, reserved). Contract awarded to H. H. Burrell, 206 S. Quince street, Philadelphia.

Garage, 2440-42 Germantown avenue, Philadelphia, \$5,500. Architect, private plans. Owner, John McCaffrey, on premises. Brick, 1 story, 30x107 feet, slag roof, cement floors. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia.

Patrol Stations (alts.), Sixty-first and Thompson streets and Sixty-fifth and Woodland avenue, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, City Hall, Philadelphia. Interior alterations, mill work, plastering and painting. Contract awarded to Hogg Construction Co., 1634 Sansom street, Philadelphia.

Factory (add.), Belgrade and Tioga sts., Philadelphia, \$7,000. Architect, private plans. Owners, C. T. Simonins Sons, on premises. Brick, second floor addition, 48x52 feet, slag roof, pine floors, electric lighting. Contract awarded to Harry Gill, Jr., 2515 Germantown avenue, Phila.

Stable (alt.) to Garage, Tenth and Sedgely avenue, \$5,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk ave., Philadelphia. Brick, 2 stories, 78x25 feet, electric lighting, cement floors, hollow tile (heating and gasoline storage system reserved). Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Residence and Garage, Paoli and Ridge avenue, Roxboro, \$10,925. Architect, Herman Miller, Crozer Building, Philadelphia.

Owner, Wm. Ammonn, on premises. Stone and brick, 2 stories, 44x47 feet and 1 story, 22x22 feet, stone foundations, tile roof, hot water heating, electric lighting, tile work, hardwood floors. Contract awarded to Frank K. Stahl, 2713 North Park avenue, Philadelphia.

Engine Room (add.), 926 North Delaware avenue, Philadelphia, \$3,000. Architect, private plans. Owner, Edw. F. Henson Co., 927 North Delaware avenue, Phila. Brick, 2 stories, 22x41 feet, slag roof, cement and pine floors. Contract awarded to Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia.

Primer Packing House, No. 6095, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, United States Government, care E. J. Benter, Frankford Arsenal, Philadelphia. 1 story, 50x24 feet, asbestos shingle roof, composition floors, metal lath, kalamain doors, roof ventilators, waterproofing. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, Philadelphia.

Bakery (add.), 3240 Walnut street, \$25,000. Architect, private plans. Owners, Hutchison Baking Co., on premises. Brick, second story addition, 48x64 feet, slag roof, alterations. Contract awarded to H. C. Dahl, 231 South Eighth street, Philadelphia.

Store (alts.), 1027 Market street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Ernest Schwemm, care Architect. Consists of sprinkler installation, concrete tank, 10,000 gallon capacity, vault lights, electric work. Contract awarded to Lam Building Co., 1001 Wood street, Phila.

Garage, rear of 105 West Upsal street, Germantown, \$1,600. Architect, L. V. Boyd, Harrison Building, Philadelphia.

Owner, Chas. Atherton, on premises. Stone, 1 story; 22x22 feet, slate roof, cement floors, electric lighting. Contract awarded to Wm. C. Wright, 22 Harvey street, Germantown.

Shop (alt. and add.), Sixteenth and Washington avenue, Philadelphia, \$7,500. Architect, private plans. Owner, Dougherty Bachran, North American Building, Philadelphia. Brick, slow burning construction, 2 stories, slag roof, concrete floors, stone foundations, rolled steel skylights (heating, plumbing and lighting, reserved). Contract awarded to Conneen Const. Co., 1737 Filbert street, Philadelphia.

Garage, 2612-24 West Huntingdon street, Philadelphia, \$10,000. Architect, private plans. Owner, F. M. Venzie, 2619 West Huntingdon street, Philadelphia. Brick and plaster, 1 story, 120x38 feet, slag roof, cement floors, metal lath, stone foundations. Contract awarded to Barclay White Co., 1713 Sansom street.

Garage, Mantua and Fortieth street, Philadelphia, \$8,500. Architect, private plans. Owner, Wm. Eurstein, 5225 Carpenter street, Philadelphia. Brick, 1 story, 80x112 feet, slag roof, cement floors, electric lighting, stone foundations (heating and gasoline storage system, reserved). Contract awarded to John P. Fallon, 449 South Sixtieth street.

Rear of 1911 Chestnut street (alt. and add.), Philadelphia. Architect, Addison H. Savery, Stephen Girard Building, Philadelphia. Owner, Jos. Habisreitering, on premises. Brick, 1 story, 25x17 feet, slag roof, electric lighting. Contract awarded to C. F. Roeger, 51 North Hutchinson street.

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PENNSYLVANIA Construction News

Residence (alt. and add.), 120 Hilldale road, Lansdowne, Pa. Architect, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owner, Barclay White, 1713 Sansom street, Philadelphia. Stucco and frame, 2 and 3 stories, 25x15 feet and 12x24 feet and 6x14 feet, slate roof, pine and cement floors, no flow tile, metal lath, tile work, metal weatherstrip, waterproofing (heating, lighting and plumbing separate bids). Owner will sub-let all contracts.

Stores and Residences (2), Bristol, Pa. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Louis Elfmann, care architect. Brick, 2 stories, 19x54 feet, slag roof, pine floors, electric lighting. Architect has received bids.

Residence, Parkside and Edgemont avenues, Chester, Pa., \$6,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Mrs. M. Williams, Chester, Pa. Brick and plaster, 3 stories, 20x36 feet and 15x17 feet, asbestos shingle roof, stone foundations, hot water heating, combination lighting, tile work, hardwood floors. Architect is taking bids. R. H. Scroggins & Co., Crozer Building, Chester, Pa., is figuring.

Chapel (alt. and add.), Llanerch, Pa. Architect, Geo. I. Lovatt, 416 Walnut street, Philadelphia. Owner, St. Lawrence's R. C. Church, care of Rev. Maurice F. Cowl, Llanerch, Pa. Stone, 1 story, hot air heating, electric lighting. Owners are supervising construction.

ing, electric lighting. Owners are supervising construction.

Residence (alt. and add.), Sharon Hill, Pa. Architects, Folsom & Stanton, 1323 Walnut street, Philadelphia. Owner, name withheld. Brick, 1 story addition, 50x20 feet, slate roof, terrazzo and tile floors, stone foundations, hot water heating, electric lighting, tile and terrazzo work. Plans in progress. Architect will take bids in one week.

Club House, Drexel Hill, Pa. Architect, private plans. Owners, Craftsman Club of Delaware Co., care of Joseph Bird, Chairman Building Committee, Drexel Hill, Pa. Stone, 2 stories, 45x90 feet, slate roof, stone foundations, vapor vacuum heating, electric lighting, tile and marble work, maple floors. Plans about completed. Owners will take sub-bids.

Cottage, Media, Pa. Architect, Wm. W. Potter, Real Estate Trust Building, Philadelphia. Owner, name withheld. Stone and frame, 2½ stories, 22x44 feet, shingle roof, hot air heating, electric lighting, North Carolina pine floors. Plans in progress.

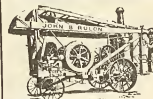
Nurses' Home, Phillipsburg, Centre Co., Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, Phillipsburg Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, lighting and plumbing, separate bids). Owners have received bids.

PENNSYLVANIA Contracts Awarded

Residence (alts.), Cynwyd, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owner, J. Raymond Jones, State Road, Cynwyd, Pa. Consists of interior alterations, 3 stories, new bath, shingle roof (plumbing and heating

reserved). Contract awarded to B. J. Hedden, Finance Building, Philadelphia.

ARTESIAN WELLS DRILLED



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Soundings

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Garage, Haverford, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owner, Arthur H. Thomas, Haverford, Pa. Frame, 1 story, 22½x26 feet, shingle roof, cement floor, hot water heating, electric lighting. Contract awarded to Frank H. Mahan, Ardmore, Pa. Residence and Garage (alts.), Radnor, Pa. \$7,000. Architect, Horace B. Peterson, 34 South Seventeenth street, Philadelphia. Owner, Herbert S. Darlington, 1829 Walnut street, Philadelphia. Consists of interior alterations, plastering, mill work, painting, glazing and hardware, composition floors, tile work. Contract awarded to H. E. Grau Co., 1707 Sansom street, Philadelphia.

Commissary, Middletown, Pa. Architects, Stuckert & Co., Crozer Building, Philadelphia. Owners, U. S. Government, Ordnance Department, Middletown, Pa. Frame, 1 story, slag roof, electric lighting, kitchen equipment. Contract awarded to James Black Masonry & Const. Co., St. Louis, Mo.

Spary Pond, Marcus Hook, Pa. \$15,000. Architect, private plans. Owners, National Aniline and Chemical Company, 25 Broad street, New York City. Concrete, 100x400 feet. Contract awarded to F. W. Van Loon, Denckla Building, Philadelphia.

New Jersey Construction News

Club Building, Sixth and Walnut streets, Camden, N. J. Architect, private plans. Owners, Y. M. H. A., care Benj. Nakal, Court House Square Building, Camden, N. J. Brick and concrete, 2½ stories, 50x90 feet, slag roof, concrete and maple floors, electric lighting, tile work, fire escapes. Owners are ready for new bids.

Machine Shop, Atlantic City, N. J. Architect, J. H. Ogden, South Carolina avenue, Atlantic City, N. J. Owner, name withheld. Brick, 1 story, 150x50 feet, slag roof, cement floors, electric lighting, plumbing. Architect taking bids due as soon as possible. C. G. Mutland and L. J. Brown, both of Atlantic City, N. J., are figuring.

Bungalow, Ventnor, N. J. Architect, Le Roy B. Rothschild, Bulletin Building,

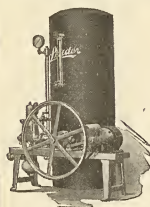
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Philadelphia, Owner, Harry Sachsenmaier, 141 North Third street, Philadelphia. Frame, 2½ stories, 35x75 feet, shingle roof, stone foundations, electric lighting, pine floors. Owner will sub-let all contracts.

Store (alts.), Camden, N. J. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner's name withheld. Brick, 1 story, flush bulks. Plans in progress.

Magazine Buildings (10), No. 2884, Lake Denmark, N. J. \$300,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Yard, Washington, D. C. Hollow tile and concrete, 2 stories, 50x150 feet. Owners taking bids, due May 1st. Thos. Reilly, 1616 Thompson street; F. W. Mark Const. Co., Finance Building, and Wm. Linker & Son, 831 Cherry street, Philadelphia, are figuring.

School, Princeton Township, N. J. Architect, Robt. Schuman, 932 Lamberton street, Trenton, N. J. Owner, Board of Education, care of M. Anderson, Secretary, R. F. D. No. 3, Princeton, N. J. Brick, 1 story, 115x60 feet, slag and slate roof, wood floors (heating, plumbing and electric work, reserved). Plans in progress.

Church, Reobling, N. J. \$15,000. Architect, Robt. Schuman, 932 Lamberton street, Trenton, N. J. Owner, Roumanian Greek Orthodox Congregation, care of architect. Brick, 1 story, 32x65 feet, slate roof, steam heating. Plans in progress.

Building, near Edgely, N. J. Architect, Harry Hill, 40 West State street, Trenton, N. J. Owner, Wm. Woodhouse, Chain Products Co., Trenton, N. J. Concrete block and frame, 1 story, 104x40 feet, wing 10x80 feet, tin roof (plumbing, heating and painting, reserved). Architect taking bids. C. Y. Barlow, Broad street Bank Building, and I. Harper Clayton, American Mechanics Building, both of Trenton, N. J., are figuring.

Hospital (add.), Trenton, N. J. \$90,000.

Architect, F. H. Beth, State House, Trenton, N. J. Owner, Board of Directors, State of New Jersey, State Hospital for Insane, Trenton, N. J. Brick or stone, 3 stories and basement, dining hall and sleeping quarters, 40x170 feet, slate roof, fireproof floors, vacuum heating, electric lighting. Plans in progress. Owners will advertise for bids in about two weeks.

Theatre and Drill Hall, Jamesburg, N. J. Architect, F. H. Bent, State House, Trenton, N. J. Owner, Board of Managers, State Home for Boys, Jamesburg, N. J. Brick, 1 story, steam heating, electric lighting, slate roof. Plans in progress. Owners will advertise for bids in about two weeks.

Country Residence (alt. and add.), near Stockton, Hunterdon Co., N. J. \$5,000. Architect, Robt. Schuman, 932 Lamberton street, Trenton, N. J. Owner, Frank Eppele, Trenton, N. J. Stone, 2 stories, hot water heating, electric lighting, tile and marble work. Plans in progress.

New Jersey**Contracts Awarded**

Garage and Cold Storage, 51 Belview street, Trenton, N. J. \$8,000. Architect, Robt. Schuman, 932 Lamberton street, Trenton, N. J. Owner, U. Wagner, Trenton, N. J. Brick, 2 stories, 25x100 feet, slag roof, concrete floors, steam heating, electric lighting, metal lath, hollow metal sash, fire doors. Contract awarded to Stephen Deikneit, 440 West Hanover street, Trenton, N. J., but not yet signed.

School, Mt. Laurel, N. J. Architect, Wm. Klemann, Trenton, N. J. Owners, Burlington Co. School Board, care of Benj. Haines, Secretary, Mt. Laurel, N. J. Brick, 1 story (6 rooms), slate roof, pine floors (steam heating, electric lighting and

plumbing reserved). Contract awarded to J. W. Shaner & Son, Palmyra, N. J. School of Industrial Arts, Quarry street, Trenton, N. J. Architect, J. O. Hunt, 114 North Montgomery street, Trenton, N. J. Owner, City of Trenton, care Leon D. Hirsch, City Clerk, City Hall, Trenton, N. J. Brick, 2 stories and basement, 80x70 feet and 25x60 feet, slag roof (steam heating, plumbing and electric work, reserved), concrete and wood floors, metal lath, rolled steel sash. Contract awarded to J. H. Morris, Broad street Bank Building, Trenton, N. J., for masonry. Contract awarded to C. Y. Barlow, Broad street Bank Building, Trenton, N. J., for carpentry.

**Miscellaneous
Construction News**

School, Keyser, West Virginia, Architect, Paul A. Davis, 3d, 1713 Sansom street, Philadelphia. Owners, University of West Virginia (Keyser Branch), care State Board of Control, E. B. Stephenson, Charleston, West Virginia. Brick, terra cotta, stone and steel, 2 stories, 107x73 feet, slate and slag roof, steam heating, electric lighting, tile work, rolled steel skylights, cement and oak floors, metal lath, roof ventilators, metal ceilings, dampproofing, wire work, ornamental iron work. Lowest bidder, Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia.

Reservoir, Yorktown, Va., \$800,000. Architect, private plans. Owner, United States Government, Bureau of Yards and Docks, 1317 F street, Washington, D. C. Reinforced concrete, steel and iron, terra cotta work, hollow tile, plumbing, damp-proofing. Owners taking bids due April 29th. F. W. Mark Construction Co., Finance Building, Philadelphia, is figuring.

Quarantine Station (add.), Craney Island, Cape Charles, Va. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owner, United States Government, care Treasury Department, Washington, D. C. Consists of (12) new buildings and remodeling attendants' quarters. Owners taking bids due May 16th at 3 P. M. Plans may be obtained from Custodian of Station or Architect.

Barracks, No. 2895, Washington, D. C., \$12,000. Architect, private plans. Owners, United States Government, Bureau of Yards and Docks, C. W. Parks, Chief, Washington, D. C. Will accommodate 300 men. Owners taking bids due April 22d.

Treasury Annex, Madison Place and Pennsylvania avenue, Washington, D. C., \$1,250,000. Architect, Cass Gilbert, 244 Madison avenue, New York City. Owners, United States Government, care James A. Wetmore, Washington, D. C. Brick, terra cotta, reinforced concrete, marble, stone and granite, 6 stories, basement and sub-basement, 187x111 feet, tile and copper roof, steam heating, electric lighting, tile, marble, and terrazzo work, rolled steel sash, hollow metal skylights and doors, cement floors, metal lath, safety tread, metal window guards, metal ceilings, water-proofing, wire work, ornamental iron work, (3) passenger and (1) freight elevators. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Phila.

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DELAWARE

Construction News

Residence (alt. and add.), Claymont, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, Thomas Rossiter, Wilmington, Del. Brick, 2 1/2 stories, interior alterations. Plans in progress.

Hall (int. alt.), Second and Tustison st., Wilmington, Del. Architect, J. J. Kennedy, Ford Bldg., Wilmington. Owner, Board of Education, care Mr. Guthrie, secretary, Wilmington, Del. Brick, 3 stories, 56x70 feet, mill work, plastering, tile and marble work. Plans in progress.

Club House (alt. and add.), 222 West street, Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Shipbuilders Union, care Architect. Brick, 3 stories, 35x27 feet, slag roof, pine floors, metal lath, steam heating, electric lighting, tile and marble work, plumbing. Plans in progress.

Store and Apartments (alt. and add.), Sixth and Shipley streets, Wilmington, Del., \$12,000. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Edw. Reynolds' Sons, Wilmington. Brick, 4 stories, 24x15 feet, slag roof, pine floors, combination lighting. Architect taking bids. Chas. Bryce, 501 West Twenty-sixth street, Geo. Charles, 701 Tattall street, J. Schunder, Mr. McNamee, and Mr. Van Vant, care Architect, all of Wilmington, Del., are figuring.

Store (alt. and add.), 608 Market street,

Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owners, Schagrin & Braunstein, on premises. Brick, 3 stories, 24x24 feet addition, mill work, slag roof, pine floors, electric lighting, elevators. Architect taking bids. Chas. Bryce, Geo. Charles, J. Schunder, and Mr. Van Vant, all of Wilmington, Del., are figuring.

Fair Buildings (12), Wilmington, Del. Architect, J. D. Thompson, Ford Building, Wilmington. Owner, Directors of State Fair Association, care Wm. B. Austin, Sixteenth and King streets, Wilmington, Del. Frame and hollow tile, 1 story, stock and training barns (12) composition roof, concrete and wood floors. Contract awarded to H. D. Haddock & Co., Wilmington, Del.

Bungalow, Cragmere, Wilmington, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, David Masters, 2001 Boulevard, Wilmington, Del. Brick and hollow tile, 1 1/2 stories, 25x40 feet, shingle roof, heating undecided, electric lighting, hardwood floors. Contract awarded to Chas. Bryce, Wilmington, Del.

Store (alt. and add.), Tenth and Market streets, Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Rocco Abessinio, on premises. Brick, 1 story, 15x10 feet, electric lighting, tile work, hollow metal skylights, plumbing. Contract awarded to J. A. Bader, Lackey Building, Wilmington, Del.

Proposals

Bonds. Improvements. Equipment.

As the Home Office and Headquarters of the Most Important Financial, Railroad, Engineering, Structural, Manufacturing and Equipment Firms in the United States, Pennsylvania offers a Particularly Rich and Productive Field for "Proposal" advertising. "The Builders' Guide" is the Only Medium in this Field.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 18, 1918.—Proposals will be opened in this office at 3 P. M., May 16, 1918, for the construction complete of twelve additional buildings and the remodeling of the attendant's quarters at the United States Quarantine Station, Craney Island, Cape Charles, Va. Drawings and specifications may be obtained from the custodian at the station, or at his office; in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Ed. L. Waterhouse (O), on premises. C. West & Co. (C), Oxford and Wakening st. Brick, 1 story, 11x19 feet, slag roof.

Dwelling, 2663 Emerald street, \$400. P. Connelly (O), on premises. C. Bornea (C), 2838 North Front street. Alterations.

Shop, 1904-06-08 East Clementine st., \$9,600. Victor Steinberg (O), 3143 Kensington avenue. Anther Brown (C), 1905 East Clearfield street. Brick, 1 story, 50x86 feet, stone foundation and slag roof.

Store and Dwelling, 4801 Rising Sun avenue, \$1500. F. C. Kallenberg (O and C), on premises. Alterations, interior and exterior.

Store and Dwelling, 846 North Sixth st., \$500. B. Cherry (O), 836 North Sixth st. Joseph Levi Co. (C), 1530 South Sixth st. Alterations.

Store and Dwelling, 315 Snyder avenue, \$650. Barney Katz (O), on premises. Louis Solgouik (C), 538 Mercy st. Brick, 2 stories, 11x12 feet, slag roof.

Store and Dwelling, 806 Vine street, \$800. Perlman Co. (O), 517 Chestnut street. B. Bornstein (C), 1510 N. Franklin street. Alterations.

Municipal Court, Twelfth and Wood sts., \$500. City of Philadelphia (O), Philadelphia. J. Morris Daniels (C), 252 South Juniper street. Alterations.

Shed, 631 Reed street, \$970. B. Eglin (O), 633 Reed street. P. Savar (C), 718 Snyder avenue. Remove frame wall, replace with brick.

Shed, Sixty-first and Gibson streets, \$350. H. A. May Foundry Co. (O and C), on premises. Open shed, 10 feet high, 35x40 feet.

Shed, Beach street and Montgomery avenue, \$2,500. Stroud & Wilgus (O), Richmond and Montgomery avenue. R. T. Mallory (C), 2316 East Lehigh avenue. Open shed, 57x90 feet.

Shop, 1630-32 Vine street, \$350. Wm. H. Baile (O), Penfield Building. G. H. Spenard (C), 822 Wood street. Alterations.

Store and Dwelling, Broad street and Erie avenue, \$400. Walter Gable (O), on premises. M. Yellin (C), 712 North

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 334 East Price street, \$300. Carl Manzo, (O), on premises. Tony Reese, (C), 343 East Rittenhouse street, Brick, 1 story, 7x24 feet, slag roof.

Shed, American and North Pike streets, \$2,000. Connelly & Co. (O and C), Second and Luzerne streets. Iron, frame, 22x100 feet, slag roof.

Stable and Garage, Ditman and Sheridan streets, \$500. A. Mignione, (O and C), on premises. Brick, 1 story, 30x115 feet, and 2 stories, 37x30 feet, slag roof.

Store (1), Dwellings (30), Hollywood and Norris streets, Myrtlewood and Norris streets, Myrtlewood and Sedgley avenue, \$76,100. Geo. A. Nahm, (O), 2736 Girard avenue. Brick, 2 stories, 15x38 feet, slag roof, hot water heating.

Garage, 2830 Girard avenue, \$950. A. J. Reiner, M. D., (O), on premises. Geo. A. Nahm (C), 2736 Girard avenue. Brick, 1 story, 25x20 feet, slag roof, stone foundation and cement floor.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, 2923 Kensington avenue, \$800. John Vincent (O), 2954 Kensington avenue. Roland Ball (C),

3128 Reach street. New flush buk and alterations.

Dwelling, 1211 Allengrove street, \$750.

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DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Franklin street. Metal fireproofing.

Dwelling, 325 Mantion street, \$300. Jacob Singer (O and C), 1515 South Sixth street. Brick, 2 stories, 12x14 feet, slag roof.

Dwelling, 501 West Mt. Pleasant avenue, \$800. Wilson L. Gill (O and C), on premises. Repairing fire damage.

Dwelling, 1734 North Thirteenth street, \$300. Wm. K. Reed (O), 1307 Montgomery avenue. Sam. R. Detwiler (C), 1719 North Thirteenth street. Put in bulk window.

Garage, 1425 Olney avenue, \$550. Max Hexter (O), on premises. McBain & Hart, Inc. (C), Broad street and Olney avenue. Brick, 1 story, 16x21 feet, slag roof, cement floor and stone foundation.

Rooming House, 213 South Tenth street, \$650. Theo. Myers (O), 923 Locust st. The John Baizley Iron Works (C), 514 S. Delaware avenue. Fire escapes.

Bank and Dwelling, 614 Fourth and Vine streets, \$12,000. Frank Di Berardino (O), 821 Christian street. Nicholas Nardy & Co. (C), 763 South Thirteenth street. Brick, 1 story, 28x18 feet, interior; 3 stories, 46x18 feet, exterior.

Office Building, 238 North Twenty-second street, \$500. Edw. M. Harris (O and C), 2214 Chestnut street. Brick, second story addition, 22x32 feet, slag roof.

Dwelling, 1310 South Tenth st., \$1275. Domenico Felici (O), on premises. Donato C. Burro (C), 809 South Eighth street. Brick, 2 stories, 8x12 feet and inside alterations.

Shop, Twentieth and Indiana avenue, \$1,500. M. L. Bayard & Co (O and C), on premises. Brick, 1 story, 20x30 feet, slag roof.

Store and Dwelling, 1115 North Fortieth street, \$425. M. Cohan (O), on premises. Max Cotler (C), 1220 North Forty-second street. Alterations.

Garage, 1610 Market street, \$800. Morris Wheeler & Co. (O), Broad and Parrish streets. Sam. J. Rea & Son (C), 1608 Fairmount avenue. Alterations.

Dwelling, Eighty-fourth and Gibson sts., \$1,000. Max Kleiman (O and C), on premises. Brick, 2 stories, 15x25 feet, slag roof.

Garage, Dyer and Duffield streets, \$300. L. E. Conkling (O), 5103 Darrah street. C. C. Carns (C), 1656 Dyer street. Frame, 1 story, 20x20 feet, slag roof.

Office, 234 Greenwicht street, \$500. Quaker City Dairies (O and C), on premises. Brick, 1 story, 16x50 feet, slag roof.

Factory, Belgrade and Toga streets, \$7,000. C. T. Simonins Sons (O), on premises. Harry Gill, Jr. (C), 2515 Girard ave. Brick, second floor additions, 48x52 feet.

Store and Dwelling, Forty-fourth and Lancaster avenue, \$400. Paul A. Rinck (O). Joseph A. Frosch (C), 1722 Wylie street. Interior alterations.

Dwelling, 215 West Columbia avenue, \$400. J. Cartwright (O), on premises. Wm. Freiting (C), 2533 North Fifth street. Alterations.

Engine Room, 926 North Delaware ave., \$3,000. E. F. Henson Co. (O), 917 North Delaware avenue. Wm. Steele & Sons Co. (C), 32 South Fifteenth street. Brick, 2 stories, 22x41 feet, slag roof.

Dwelling, 6346 Sherwood road, \$800. J. P. Edwards (O), on premises. M. W. Young (C), Overbrook. New shingle roof.

Garage, 2440-42 Germantown avenue, \$5,500. John McCaffrey (O), 2440 Germantown avenue. E. E. Hollenback, Inc. (C), 1804 Brandywine street. Brick, 1 story, 30x107 feet, slag roof, cement floor.

Store Room, 1705 Federal street, \$500. Emmet B. Lass (O), 2303 Lombard st. M. J. O'Rourke (C). Alterations.

Garage, 1610 Glenwood avenue, \$800. Albert R. Ellis (O), on premises. A. H. Landay (C), 1918 West York street. Brick, 2 stories, 18x17 feet, slag roof.

School, Fifty-fourth and Lansdowne avenue, \$155,000. City of Philadelphia, Board of Education (O), 19th above Chestnut. Wm. R. Dougherty (C), 1608-10 Sansom street. Stone, 3 stories, 36x68 feet, slag, hot air heating.

Garage, 924 Spring street, \$1,520. City of Philadelphia (O) 19th above Chestnut. F. A. Havens & Co. (C), 945 N. Nineteenth street. Brick, 1 story, 47x13 feet, slag roof.

Garage, Marshall and Diamond streets, \$15,000. Geo. G. Melloy (O), Art Club, Philadelphia. H. H. Burrell (C), 206 S. Quince street. Brick, 1 story, 71x171 feet, slag roof.

Garage, 39 North Upsal street, \$500. E. C. Enhardt (O), on premises. L. H. Cahan (C), 128 East Walnut lone. Brick, 1 story, 16x20 feet, slag roof.

Storage Building, 1306-08-10 South st., \$11,000. M. Cohen (O and C), 1206 South street. Brick, two new 3 story additions, 16x58 feet, slag roof, fire doors and interior alterations.

Dwelling, 1742 North Sixth street, \$500. Louis G. Stambler (O), on premises. M. Zussmann (C), 99 North Marshall street. New front and alterations.

Store and Dwelling, 1172 South Tenth street, \$700. Tannous Mansour (O), on premises. M. Cipriona (C), 1134 Watkin street. New flush bulk and alterations.

Dwelling, 1163 South Tenth street, \$600. G. P. Paola (O), on premises. M. Cipriona (C) 1134 Watkin street. Alterations.

Amusement, Point Breeze Park, Twenty-fifth and Penrose ave, \$1475. Keystone Realty Co. (O), Land Title Building. Lam Building Co. (C), 1001 Wood street. Alterations to porch.

Factory, 1206 Nectarine street, \$850. Tinius-Olsen Testing Machine Co (O), 500 North Twelfth street. Lam Building Co. (C), 1001 Wood street. Alterations.

Coal Bin, 2411 West Norris street, \$950. Standard Dental Mfg. Co. (O and C), on premises. Brick wall, 11x40 feet, 7 feet high.

Bakery, 3240 Walnut street, \$25,000. Hutchison Baking Co. (O), on premises. H. C. Dahl (C), 231 South Eighth street. Brick, second story addition, 48x64 feet, and alterations.

Garage, Fourth and Ruscomb streets, \$825. August Schambacker (O), 4602 N. Twelfth street. G. Y. Soux (C), 3731 York road. Brick, 1 story, 16x17 feet, slag roof, cement floor.

Garage, Jasper and Hilton sts., \$4,700. W. H. Whiteman (O), 1847 East Allegheny avenue. Thomas Duff (C), 4666 Wyoming avenue. Brick, 1 story, 67x49 feet, slag roof, stone foundations, skylights.

Garage, Broad and Shunk streets, \$500. M. Allaman (O), on premises. H. B. Prettyman (C), 2603 South Broad street. Brick, 1 story, 15x19 feet, slag roof.

Dwelling and Garage, Paoli and Ridge avenues, \$10,925. William Ammann (O), on premises. Frank K. Stahl (C), 2713 North Park avenue. Stone and brick, 2 stories, 44x47 feet, tile roof; stone, 1 story, 22x22 feet, tile roof.

Garage, 6414 North Twenty-first street, \$540. Geo. Sonnaday (O), on premises. Frank K. Stahl (C), 2713 North Park ave. Brick, 1 story, 16x20 feet, slag roof.

Dwellings (21), Lambert and Spencer streets, \$48,300. J. K. Davis (O and C), 2400 West Oakdale street. Brick, 2 stories, 15x29 feet, slag roof, steam heating.

ANNUAL CONVENTION OF AMERICAN INSTITUTE OF ARCHITECTS

The Fifty-first Annual Convention of the American Institute of Architects will be held in Philadelphia on April 24th, 25th and 26th, 1918, under the plan of a voluntarily reduced delegation.

Chapters of the Institute in 40 sections of the country will be represented by delegates and the headquarters will be the Bellevue-Stratford Hotel, but the Convention sessions will be held at the Art Club.

The Convention will give particular consideration to the question of "The Architects' Service." A clearer knowledge by the public of the scope of the service that the architect is equipped to perform is as important to the profession as is the raising of the level of accomplishment and quality of service performed by the indi-

vidual members of it. It is hoped that both may be stimulated by a full discussion of professional service at the Convention.

Tuesday evening, April 23rd, prior to the opening day, was reserved for an informal meeting of the delegates.

Wednesday, the 24th, the first day of the Convention was devoted to the consideration of the reports of Committees and the Board of Directors and other business.

Thursday, the 25th, will conclude unfinished work of the preceding day and begin the direct consideration of the principal theme of the Convention, namely, "The Architect's Service." Architects specially qualified to speak on certain phases of the subject will be heard first and thereafter there will be a broad and

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constructive discussion on the part of delegates.

Friday, the 26th, will be devoted to a continuation of the discussion of the "Architect's Service" with particular reference to the Government, the architect, and the Workman in present-day industrial and related conditions.

Friday evening will conclude the Con-

vention with the annual dinner at the Germantown Cricket Club. Speakers of National prominence will address themselves to some special phases of the Architect's Service, with particular reference to the National Government.

D. Knickerbacker Boyd is Chairman of the local Committee on Public Information.

PHILADELPHIA TO BE GREATER INDUSTRIAL CENTER

Plans Submitted for Development—Radius of 60 Miles Included

Plans for making Philadelphia one of the greatest industrial centers in the land were submitted by members of the Comprehensive Plans Committee and the Philadelphia Chapter American Institute of Architects, at a meeting in the Mayor's office recently.

The Comprehensive Plans Committee adopted a resolution requesting the Philadelphia Chapter of the American Institute of Architects to continue its study looking to the development of Philadelphia, comprehensively and industrially, between this city and Trenton. To consider the work of the architects a meeting will be called in the first week of October, at which representatives of all the towns included in the quadrangle between Wilmington, Trenton, Bethlehem and Reading, the territory touched by the plans will be present.

A radius of sixty miles is included in the area. Motor truck transportation is to be developed to knit the section together. The plans drawn by the architects for the development of the city were presented by John Irwin Bright, M. D. Medary, John Molliter and John P. Sinkler.

Pending the ratification or adoption of the plans of the architects a campaign of education is to be conducted among the interests involved.

Action by the next Legislature making the carrying out of the plans was referred to the City Planning Committee, of the Philadelphia Comprehensive Plans Committee. This committee is composed of John Hall Rankin, chairman; Alba B. Johnson, Director Webster, Chief Albright of the Bureau of Surveys, and Joseph P. Gaffney, chairman of Councils' Finance Committee.

Mr. Medary said that the housing situation was responsible for the undertaking of the study by the architects. The motor truck roads included in the study, he said, would extend from Wilmington to Trenton, and would serve as a continua-

tion of Delaware avenue in Philadelphia. The road was far enough back to prevent interference with shipyards and be of service to the piers.

Philadelphia, Mr. Medary said, has outgrown her municipal buildings and when new ones are erected they should be placed at convenient and practical points and not at any site where there happens to be a piece of vacant land or an unoccupied building.

WITH APOLOGIES TO AESOP.

A certain man took great care to advertise in boom times and to keep his business in good condition. When war came, his business was somewhat reduced, and he allowed his business to suffer through lack of publicity. As soon as the war was over, boom times returned and the man hastened to advertise and resuscitate his business—but it was too late. His product was forgotten, other well nourished and well advertised businesses took first place and his enterprise no longer yielded the profits of former years.

A man, tired out with the strain of keeping his business going, lay down and fell asleep close by the edge of the well of "Old time methods." Fortune came along, whispered, "Advertise," in the man's ear, thus waking him. Then said Fortune, "My dear man, I have saved your business. If you had fallen into the well, everybody would have laid the blame on me; but tell me truly now, would the fault have been yours or mine?"

Very pertinently Secretary A. H. Skillings, of the Worcester, Mass., Builders' Exchange, says in the "Telegram" of that city: The Builders' Exchange of Worcester has just held its first of a series of monthly meetings for members, and judg-

ing from the goodly number present, it certainly has the appearance that the "bread cast upon the waters" during the past two or three years, is about to return, multiplied many fold. The Builders' Exchange is not only the home of the general contractor, but of the sub-contractor and supply house, as well, and at these monthly meetings an abundance of valuable information is to be gained by those who attend. This is one of Worcester's oldest organizations, having been actively engaged in watching the general building conditions, with the view of improving them whenever possible, since 1881, and although startling headlines in the press have not always announced its progress, nevertheless, the good work has been steadily going forward. Efforts have never been lagging or unproductive of good results. Fully 80 per cent. of those eligible to membership are already on the list of active members.

The Woodoleum Manufacturing Company, Philadelphia, has just issued for the architectural and building trades, a booklet directing attention to the many advantages of composition flooring.

Increasing scarcity of good lumber, rigid requirements of City Boards of Health, economy in cleaning buildings, large and small, the elimination of dust, retreats of vermin, and precautionary measures against fire have combined to create a growing demand for an efficient, sanitary and durable substitute for wood flooring.

There is likewise a demand in other lines of trade for a substitute that possesses the essentials of hardwood, with such additional advantages as durability and proof against heat, moisture and electricity. Various uses, applications and tests and adaptability of woodoleum flooring as well as the many installations of this flooring are enumerated in this interesting booklet. Mailed upon request.

NON-ESSENTIAL INDUSTRIES.

What are non-essential industries. It would be difficult to answer this question offhand, and the ordinary citizen would not attempt it. It will be equally difficult for the Government to answer the question, even after due consideration, although it is announced by the Fuel Administration that non-essential industries will not receive coal in the near future, and possibly during the remainder of the war.

There are very few industries in the United States which are not essential. One fact must be borne in mind, and that is that the country, in order to get full efficiency, must maintain as far as possible

its prosperity. Anything which tends to eliminate prosperity and to bring depression on one section or another of the country is an element which makes for delay in winning the war.

Every industry which gives employment to labor helps in winning the war. Every industry which produces things which are necessary in the daily life of the people is not a non-essential industry, but is an essential and vital industry in some section of the country.

The arbitrary use of power is a serious menace to co-operation, and if, in the immediate future, industry is deprived of coal by orders from Washington it will have a bad effect.

The less rules and regulations are made the better it will be for the country, and there should be a broad comprehension of the necessity of maintaining intact our industries, even under the stress of war.—April Bulletin Chicago Building Construction Employers Association.

statement of Dean Pounds, of the Harvard Law School, that "the greatest thought of this century is the transference of value from property to humanity." These results he showed were in many cases the outgrowth of the primary desire to improve materials, to make for more efficient utilization, to decrease property loss, to lessen insurance and accident rates—all of which contributing causes were most laudable and to the furtherance of which he urged every member of every organization to give his personal interest and all the time possible. That is, for each to consider himself a contributor to national development through closest co-operation with all local units, which units he pointed out should be co-ordinated in each locality through organizations similar to that in New York, known as the Joint Committee on City Departments which is composed of representatives from all bodies allied with the building industry, including the architects, engineers, builders, underwriters, labor organization, city departments, officials, and all the crafts and trades.

He urged the formation of a Council on Structural Activities in Philadelphia, with larger functions as before indicated, so that through a closer co-operation of all these interests, the community might be served authoritatively.

Mr. Boyd concluded his remarks by congratulating the Philadelphia Builders' Exchange upon its present activities and upon its Monthly Bulletin, which has proven itself a valuable medium for public information. He suggested frequent listings therein of the many appropriate valuable publications of the Government and of the organizations to which he had referred. In speaking of the work being performed by some of these organizations the benefits of which were shared by all, he asserted that these benefits implied a reciprocal obligation which could be met by interested bodies like the Philadelphia Exchange becoming affiliated, through membership, with bodies like the American Society for Testing Materials, the National Fire Protection Association and the National Safety Council, and, through delegates, participating in their work and deliberations. Such action, he stated, would set the pace for other Exchanges and each would thus add to the effectiveness and prestige of the National Association of Builders' Exchanges. This process of local co-ordination and extended participation applied throughout the country would, he claimed, foster the development of a permanent movement for the nationalizing of structural activities under what would undoubtedly become a function or department of the National Government devoted to Public Works and Structural Service.

BRIEF REPORT ON ADDRESS BY D. KNICKERBACKER BOYD

The Co-ordination of Structural Activities

Mr. D. Knickerbacker Boyd, the Editor of the Structural Service Department, 'Journal of the American Institute of Architects, and former Secretary of the Institute, was the guest of the Master Builders' Exchange of Philadelphia recently and delivered an address on "The Co-ordination of Structural Activities." Mr. Boyd referred to the importance of the building industry, not for its sake alone, but as a part of the more comprehensive sphere of action involved in the sheltering of humanity.

He called attention to the marked lack of co-ordination in all activities concerned with the three prime necessities of life—food, clothing and shelter—as compared with concerted action, organization and control in the field of transportation, communication and other present day utilities, which have become necessities in our modern civilization.

He emphasized the fact that all those connected with the building industry must not think of it in the terms of the materials with which they are chiefly concerned, but in terms of the good of the whole. This would lead us all, he said, away from thoughts of bricks and mortar, stone and lumber, cement and lime and other products of nature and man, except as their improvement and most effective use will make for the safety, health and comfort of the occupants of all buildings.

This difference in manner of approaching the subject he considered an essential to a proper recognition of the importance of the subject and was the reason why, instead of entitling his remarks "The Co-ordination of the Building Industry," he carefully chose the words "Structural Activities."

The consideration of these, he pointed out, would bring into alignment with or-

ganizations in the building industry, *per se*, all those other large and important bodies, including departments of the Government, which are concerned with securing more light and air in human habitations, wider streets and lower buildings, pure water and proper sanitation, sound and safe construction, better conditions of living and employment, safety from fire, accident and panic and other important factors in the field of shelter.

In the matter of federalizing the building industry Mr. Boyd referred to the important movement now under way, and stated that the suggestion had been made and was now by way of consummation that the National Association of Builders' Exchanges of the United States, the National Builders' Supply Association, and the American Institute of Architects should call a national conference to bring about co-ordination of the building industry. In giving such a movement his hearty endorsement he urged that the movement be made to embrace the whole field of structural activities relating to shelter by including so far as possible all organized bodies concerned with the various phases before touched upon.

Such a movement, with such a motive, would prove an irresistible force and be relieved of partisan spirit and materialistic aspect. He pointed out that what helps all helps each one in any industry and mentioned many instances of existing national organizations which were, by exploiting the proper use of other materials in connection with their own, making for the better and hence wider use of each.

Several illustrations were given to show how these efforts on the part of technical societies and architectural, engineering and other organizations and manufacturers associations were corroborating the

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Cash Capital	-	\$ 4,000,000.00
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Reserve for Losses	-	4,419,000.00
Reserve for Taxes	-	950,000.00
Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
Losses Paid Since Organization	-	192,518,273.33

The Oldest American Stock Insurance Company

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Explosion
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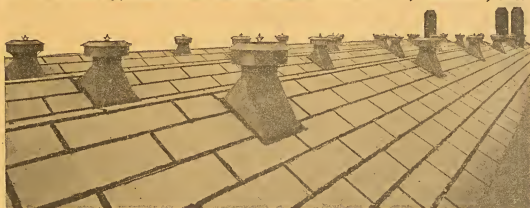


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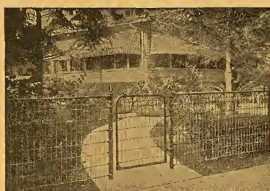
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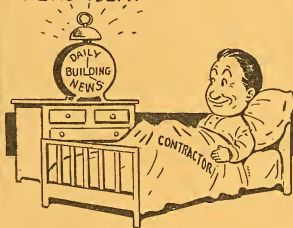


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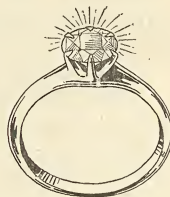
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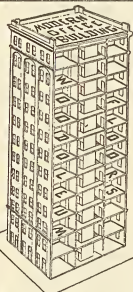
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Devoted to the Advancement of American Architecture, Structural
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VOLUME XXXIII
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May 1, 1918

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As The Editor Sees It



THE fifty-first annual convention of The American Institute of Architects which was held last Wednesday, Thursday and Friday in this city, is of peculiar significance at this stage of our national development.

Architects everywhere are aware of the great and new importance of the architectural profession at this time. We read in a newspaper article, "War has blighted building of all but the most necessary structures, few of which call for the artistic side of architecture"—this old conception of the relation of architecture to our national development, is now obsolete and, we hope, will never be revived, for architecture from this time forth will concern itself not only with the designing and planning of public buildings and rich men's homes, but with the veritable life of the nation—the homes of the people. Surely no greater opportunity could be open to a body of men eager for the welfare of their country and her people, nor a more vitalizing ambition be presented to a profession than the planning of the homes of the people. The Government experts will set the standards and make the regulations—but regulations are cold, lifeless things, and it must remain with the architect to put life into these standards and regulations and make them homes. The time has now come when architects can realize Mr. Milton B. Medary's prophetic utterance that "we" (the architects) "must be free to offer architect-

ure as a great department of human service."

At the meeting on Wednesday morning Mr. John Laurence Mauran, of St. Louis, president of the Institute, gave a resume of the part played in war preparations by members of the profession. One of the most practical services rendered has been the saving to the Government of \$20,000,000 in the building of the army cantonments.

At this meeting the possibility of a plan, to eliminate waste of time and money resulting from competitions, was discussed.

Thursday morning was devoted to nominations of officers and routine business. At the afternoon session Mr. Medary read a most interesting paper on "The Architect after the War." He spoke on Social Service, and the influence which the architect can exercise on the health, morals and general life of the community. Mr. Medary feels very keenly the importance of this aspect of the architect's profession and is doing all in his power to further architecture for the good of the people. He wrote some time ago, "How can the public appreciate architecture when the great mass of it is debarrd from any more of the benefits which it has to confer than an occasional contact with some grandiose structure?"

Mr. R. Clipston Sturgis read a paper on the "Architect as an Administrator," which dealt with the many complex problems of building which the architect

must co-ordinate in his planning—the cost of living; the servant problem in its relation to the upkeep of the home; the ventilation; the exposure; the lighting; the conveniences which appeal to the woman; the comforts which the male member of the household appreciates; in short, the architect must combine the acumen of a business man with the tact of a diplomat.

"The Architect in Civic Life," by Mr. Elmer C. Jensen, was a scholarly paper revealing a thorough knowledge of his subject, and presented many phases of architecture worthy of consideration.

Mr. E. J. Russell, in his address on "The Building Situation, Past, Present and Future," took as a text the words "Faith, Charity and Hope." We base our faith on the past, our charity is of the present and we hope for the future.

Mr. Russell brought some interesting figures which are the result of investigation of the building situation of to-day by the St. Louis Chamber of Commerce. These statistics show, that of the increase in the cost of building, 75% is due to labor prices and 25% due to general increase in prices of materials.

Mr. Russell emphasized the importance of keeping the building industries going, as there are 20,000,000 people in the country dependent on these industries for their livelihood.

General discussion followed the reading of the papers. Mr. D. Knickerbacker Boyd urged that the architects co-operate with the various technical societies

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and associations throughout the country with the idea of co-ordinating and correlating structural activities. Mr. Boyd impressed upon the convention the great advantages of using the available data offered by these societies and associations, and of actively participating in the work of these organizations. His aim, in brief, is—

First: Bring into active co-relation with the work of the Institute every allied effort which is being made to standardize building methods and materials.

Second: Give to architects to make use of all standardizations whenever they have been reached and passed upon by competent organized bodies.

Third: Encourage architects to make use of all standardizations whenever they have been reached and passed upon by competent organized bodies.

Fourth: To encourage manufacturers to continue, through properly constituted bodies, their efforts toward solving problems of standardization, to the end that the resultant savings may reduce the cost of building.

Fifth: Through the quick and orderly dissemination of all such information, bring the architect, the producer and the manufacturer into the closest possible contact, without loss of time and with the minimum of expense to each.

Application of the principles advocated by Mr. Boyd would undoubtedly assist the Government win the war; and steps were taken at the meeting on Thursday to initiate a conference of all the industries relating to the building trades for the purpose of determining how they could be best amalgamated to serve the country at this time.

One of the most important and interesting papers presented at the convention was contributed by Mr. Frederick L. Ackerman, of New York City. As Mr. Ackerman was called to Washington his paper was read by William S. Parker, Secretary of the American Institute of Architects.

Mr. Ackerman was well fitted to handle the subject under discussion—"The Architects' Service, with Particular Reference to the Government, the Architect and the Artisan in Their Relation to Industrial Housing"—as he himself made an investigation and exhaustive report of housing conditions in England. Mr. Ackerman impressed upon his hearers the imperative need of adequate housing facilities for the working man, in order to keep labor here after the war. If we do not look squarely at this vital phase of the situation, we shall surely find labor seeking more comfortable quarters as soon as the war is over. Furthermore, he emphasized the extending of Government credit or lending of Government funds for the promotion of this work. This plan is now being successfully car-

ried out in England. Housing activities in the United States are largely due to Mr. Ackerman's investigations and the facts revealed by them.

Mr. C. H. Whitaker, Editor of *The Journal of the American Institute of Architects*, applauded and approved the statements made by Mr. Ackerman.

He added that before the housing problem can be satisfactorily solved, the land problem must be disposed of—the land must be secured by the Government, thus eliminating speculation.

Mr. Whitaker suggested vocational representation in the Government, and

urged architects to achieve recognition in this direction.

The officers elected for the year 1918-1919 are

President—Thomas R. Kimball, Omaha; First Vice-President—Charles A. Favrot, New Orleans; Second Vice-President—George S. Mills, Toledo; Secretary—William S. Parker, Boston; Treasurer—D. Everett Waid, New York.

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MAKING OF CLAY PRODUCTS RESTRICTED

The United States Fuel Administration issued on April 17 regulations, approved by the War Industries Board, restricting the manufacture of clay products and rearranging and dividing the manufacturing program of this industry in such a way as to place it on the basis of war industry.

Ten orders of this series were signed by Fuel Administrator H. A. Garfield, the products dealt with being arranged in classes and manufacture curtailed on a percentage basis, as follows:

	Per cent. restriction.
Face brick	50
Common brick	50
Paving Brick	50
Terra cotta	50
Roofing tile	50
Floor and wall tile	50
Sanitary Ware	50
Hollow tile	25
Drain tile and sewer pipe	25
Stoneware (except chemical)	15

Curtailement in each case is based on the average output of the past three years. It will be noted that the percentage of curtailment is not equal in all classes of clay products. These figures have been reached after careful investigation and represent rates of production which will be for the best interests of the necessary Government work and in general for the interests of the manufacturers involved.

The experience of the last year has brought two facts clearly to the front: First, that as far as possible the new war work must be put into old factories to take the place of less essential production. This method of producing war supplies prevents building problems, housing problems, and transportation problems which necessarily follow the setting up of new plants for war production; second, that in addition to this transference it will be necessary for many industries to make deliberate sacrifices of a part of their ordinary business in order that there may be

transportation, men, and materials enough for war production.

The War Industries Board and the Fuel Administration have been for several months obtaining information which would enable them to reorganize lesser essential industries, such as building materials, which tax transportation facilities and fuel supplies to the largest extent.

The Bureau of Standards and experts associated with each industry have placed their services at the disposal of the government and have aided in reaching conclusions.

In general the minimum basis of running for the year has been established in each class of clay products. This minimum has taken account of the more necessary requirements outside of strictly war activities as well as the necessities of the Government. Beyond this, it is arranged that whenever the Government departments certify requirements in any of the divisions exceeding the productive capacity of a given district on the minimum basis, such facts will be certified to the Fuel Administration and permits for additional running will be issued.

The aim has been to conserve the larger interests of the trade involved. Equal treatment for all plants is provided wherever possible. Allowance, however, is made in the plan for recognizing individual instances where an abundance of fuel and absence of congestion make it desirable that a large proportion of production be permitted in a given district. The granting of such additional output has been hedged about with safeguards so that general conditions in the different trades will not be seriously affected.

The full form of the order relating to common brick is produced in order to show the general requirements of the Fuel Administration in dealing with all of the clay products. The orders relating to the other products are of the same general form and tenor.

Regulation Restricting Fuel Consumption by Manufacturers of Common Building Brick.

The term "common building brick" in this regulation shall be construed to cover all common building brick made by any process whatsoever.

The term "manufacturer" in this regulation shall be construed to cover any person, firm, association or corporation engaged in the manufacture of common building brick.

No manufacturer, as defined above, shall at any of his plants, consume, burn, or use fuel of any description, including coal, coke, fuel oil, natural gas or other petroleum products, or use power derived from any such fuel, for or in connection with the manufacture of common building brick, as above defined, during the year beginning January 1, 1918, and ending December 31, 1918, to an amount in excess of fifty per cent. (50 per cent.) of the average annual amount of fuel consumed at such plant for or in connection with the manufacture of common building brick during the period from January 1, 1915, to December 31, 1917, excepting—

First: In case such plant was not in existence on January 1, 1915, then, and in such case, the period during which it has been in existence prior to January 1, 1918, shall be used as a basis in arriving at a determination as to the quantity that would constitute one-half of the average annual production.

(a) Upon evidence that the necessities of the Government in the particular district in which such manufacturer is located can not be supplied by plants within practical shipping distance of the place where the United States Government requires such product, unless permission is granted for such excess production, and that on this account it is necessary in the interest of the United States Government that such permit be issued.

(b) Upon receipt of certification from the Fuel Administrator of the State in which the plant is located that the material to be manufactured is to be used in connection with building operations of urgent public necessity and that the fuel used in manufacturing such material can be spared for such purpose.

Second. That whenever two or more manufacturers of common building brick shall find that a further fuel economy would result from combining the output of two or more plants, then and in such cases it shall be permissible, after receiving written permission from the Fuel Administration, for the several manufacturers to combine the aggregate allotment of fuel to the several plants, to be used jointly for the purposes of production, the manufactured products of such combined plants being distributed to the individual manufacturers as may be agreed between them.

In plants which manufactured common building brick exclusively during the years 1915, 1916, and 1917 manufacturers shall not consume, burn, or use fuel to manufacture clay products other than common building brick without first presenting evidence that the manufacture of such other clay products is in the interest of the United States Government and receiving from the United States Fuel Administrator permission in writing to manufacture such products.

It is ordered that on or before June 30, 1918, each manufacturer of common building brick shall report to the United States Fuel Administration the number of common building brick manufactured and the amount and kind of fuel consumed during the period from January 1, 1917, to December 31, 1917, and the amount of stock on hand December 31, 1917, and that thereafter semi-annual reports showing the number of common building brick produced, the amount and kind of fuel used, and the stock of brick on hand shall be made for the period from January 1, 1918, to June 30, 1918, and from July 1, 1918, to December 31, 1918. The report for the first period shall be made not later than August 1, 1918, and for the second period not later than February 1, 1919.

Any such manufacturer violating or refusing to conform to the above regulation will be liable to the penalty prescribed in the act of Congress. (Fine of not more than \$5,000 or by imprisonment for not more than two years, or both.)

(Signed) H. A. GARFIELD,
United States Fuel Administrator.

Stoneware.

"Stoneware" is construed to cover vitrified and glazed receptacles and containers made from common buff burning clays by any process whatsoever, excepting stoneware used in the chemical industry.

Sewer Pipe, Drain Tile, and Flue Linings.

"Sewer pipe, drain tile, and flue linings" are construed to cover all vitrified clay, cement, or concrete sanitary sewer of culvert pipe, in sizes 42 inches in diameter or under; all vitrified or non-vitrified clay, cement, or concrete drain tile; and all clay,

cement, or concrete wall coping and flue lining made by any process whatsoever.

Terra Cotta.

The term "terra cotta" is construed to cover all architectural terra cotta, whether glazed or unglazed, intended to be used for the interior or exterior construction or decoration of buildings, made by any process whatsoever.

Sanitary Ware.

The term "sanitary ware" is construed to cover all burned clay wares used in plumbing installations, made by any process whatsoever.

Paving Brick or Block.

The term "paving brick or block" is construed to cover paving brick or block intended to be used for the paving of roadways and streets and other paving purposes, made by any process whatsoever.

Floor and Wall Tile.

The term "floor and wall tile" is construed to cover all clay tile, either glazed or unglazed, intended to be used in floors or walls, for either utilitarian or decorative purposes, made by any process whatsoever.

Hollow Tile.

The term "paving brick or block" is construed to cover all forms of fireproofing or hollow building block except silo tile, which are used in the erection of floors, partitions, walls, and for other constructional purposes made by any process whatsoever.

Face Brick.

The term "face brick" is construed to cover building brick intended to be used solely for facing purposes, as differentiated from common building brick made by any process whatsoever.

Roofing tile.

The term "roofing tile" is construed to cover clay tile, either glazed or unglazed, intended for use in the covering of building roofs, made by any process whatsoever.

SMALL HOUSE RECONSTRUCTION IN FRANCE

(From the French of Henri Lavedan in "L'Illustration.")

If the attention of those interested in housing in the United States has been almost entirely concentrated on the housing undertakings of the British Government, it must not be thought that France and Belgium are not deeply concerned with their own problems. In the former, nothing but plans are now possible, but these are being studied in the

broadest way, and there need be no fears but that the reconstruction of Belgium will proceed along lines informed with the lessons of the past. It is perhaps worthy of chronicling the fact that extensive studies for the rehabilitation of Belgium have already been made by the German authorities, and the preliminary proposals, at least in part, have

been issued in printed form. But the world will still have something to say about this!

In France, the loss of the iron and coal areas resulted in a temporary industrial depression, with a consequent expansion in England, where the burden of war production fell with compelling force. Thus the French were not faced with any such housing problems as arose in England. The restoration and expansion of the war-making industries in France was a gradual process permitting readjustments which were not possible in England, nor, as experience has so painfully demonstrated, in this country.

Much temporary reconstruction work has been done in France, where there developed the imperative necessity of rehabilitating the reconquered areas which had been devastated by the enemy. But the future will require an immense amount of study and a vast expenditure. To the excited few in the United States who have so mistakenly assumed that the problem of reconstructing France was one that should be left to its lovers in this country, there may eventually come a perception of the fact that France, architecturally, is able to care for her own interests.

In the appreciation of M. Henri Lavedan, a translation of which is given below, there dwells a perception of the housing problem which is so illuminating and so revealing—so profoundly touching in its humanity, so inspiring in its delicate message to those who face this question in other lands—that it might almost be said to constitute the basis of the human and the esthetic approach to the home. Other factors enter in, as we know, but it is only through an intelligent blending of all the various phases that there will be laid the foundations of a stable national life—if we admit that this must, in all cases, be founded and maintained upon the home. There need be no fear but that we may look hopefully to France for a contribution worthy of her great sacrifices, her noble intelligence, and her will to live. The article by M. Lavedan, to which we refer, is as follows:

"Since the commencement of this year 1918, when there was affirmed with so much energy the confidence, the hope, and the faith of French hearts, there has been accomplished, quite apropos, a vivid demonstration of our will to live and to prepare without delay for the immediate future.

"As is well known, a competition (In the preliminary competition there were 1,498 entrants; in the final, there were 340, of whom 270 were soldiers) was held 'for the reconstruction of the rural habitations in the liberated regions,' and the Museum of Decorative Arts exhibited in its rooms, until the first day of February, the drawings, chosen from very many, that were deemed worthy of special mention and of possible adoption as the types of architecture appropriate to the regions, to the circumstances, and to the necessities of the future.

"The exposition is both the proof and the fruit of a unanimous motive, of a touching and scholarly effort. We do not doubt, however,

that the public went there, influenced not only by a sympathetic curiosity but by that active desire and by that generous impulse which impels us, each in our sphere and according to our abilities, to compete in the great work of general re-establishment, of universal reconstruction. It can be well said that, without active participation, we shall contribute nevertheless to the success of the common enterprise by the cordial interest which we shall have shown. We shall contribute our foundational stones, invisible and real. In these questions, the warmth of public opinion is precious and of a communicative strength that nothing equals. It alone can create the torrent of zeal that goes straight to the goal and carries away all the obstacles.

"The first impression of this exhibition, which is not once changed during the length of the visit, is instantly complete. The eyes and the spirit find in it their charm and their profit. I well know that the majority of those who passed through to look at these drawings preoccupied themselves less perhaps with their practical value and the conveniences that they offer than with their picturesque exterior and the bewitching aspect that they present. No matter. It is not necessary to possess technique in order to understand the very special conditions that the program demands, and the way, so often fortunate, in which, in different degrees it has been studied, grasped, and visualized by all the competitors.

"It was not a question, indeed, of considering the rebuilding of amusement resorts or the country villas of the middle class. These, without doubt, have known as much as the others the destructive rage of the invader, and the moment will also come to determine to rebuild them in the same spirit of local and reasoned adaptation, the source of inspiration of all the good workers of the rebuilding renaissance. But the first to be considered was the most urgent—the primary and indispensable requirements of existence. The necessities of nourishment, of cultivation, of manual labor, the discipline and conditions of life itself clearly indicated and limited the immense work.

'Bread made necessary the oven, and flour, the mill. The fields, no sooner cleansed and put back to a normal state, would demand the farm buildings; and everything depending on the sun and the earth, both beasts and people, would desire the roof and its shelter. The first scheme was thus naturally indicated. The inn, the bakery, the cafe, the smith's forge, and, above everything, the houses of the peasant, of the farmer, of the rural worker; such were the humble and sovereign edifices to be first erected, the pillar and support that should be determined and placed, the nucleus around which would group themselves afterward, little by little, in the near and far-distant future, the different and successive elements of the resurrected village. What task more important than the careful and studied reformation of all these cells, broken and obliterated! What noble attraction, what magnificent stimulus did the difficulties themselves present!

No! That was not an ordinary competition, one of those cold and common tests that concern but the hand and the intellect and leave the heart a stranger. It has been absolutely necessary in this case, that, in order to succeed, the heart should aid the mind and direct the hand.

All of these drawings, the best as well as those that do not attain perfection, nevertheless permit to appear clearly the tender thoughts of their authors. In addition to their remarkable merit, they are the stirring acts of patriotic piety. One may perceive the leaven of the most exquisite solicitude at the same time that one is surprised at a kind of divination with which a number have understood and penetrated the character and spirit of the district to be restored. Neither mistake in taste nor mistake in tact. Nowhere does one find any sentimental heresy.

"I admired at every instant this comprehension, so unerring and so correct. 'Why,' said I to myself, 'it seems that these young architects never lived anywhere but in the country and in that part of the country which is the object of their study!' And it is also an object for inquiry, when one sees the precision, the confidence with which some have placed and distributed the farm buildings, whether formerly they have not been innkeepers and agriculturists.

No, that was not necessary. It was sufficient for them, knowing their trade, to be soldiers, to have seen and experienced the ravages of war. The sight of the ruins was in itself capable of suggesting to their intelligence, moved to pity, the most suitable way to reconstruct. They have learned 'on the job' that the new habitation cannot be well erected except by considering, respectfully, the ruins. A great number of these young men are in the army. Their ideas were conceived in the trenches, under canvas, within sound of the cannonade. In order to germinate, their ideas, like seeds, had to be put first in the earth, in the bottom of the hole dug for them. Being in the foundation ditches, they placed the piers. The air, earth, and climate of the regions where, in a close intimacy, they were forced to prolong their sojourn, informed and impregnated them until they were native to the locality. In working at the resurrection of the particular corner of France, destroyed beneath their gaze, they obeyed with fervor a sentiment of individual and filial gratitude. This is the reason why the plans were conceived and executed in a will so expressive of duty and love.

It is impossible to mention all the names of those who have devoted themselves to the work of salvation, but permit me, however, to draw special attention to M. Pierre Sardou, government architect, who no longer can count his successes. In the army since the beginning of the war, he obtained first prize for his 'House of a Rural Property Owner.' How charming and practical it is, this modest and solid home, all on one floor, with its wall in natural stone color and its brown roofs. Tied to the past by certain motifs, sober in line,

of a good, frank rusticity, hospitable and well protected, it constitutes on the side of the road of life the ideal shelter of peace, of labor, of repose, as well made for living therein a long time as for there dying in the calm and the satisfaction of a beautiful evening.

Mr. Bonnier, an aviator, also winner of one of the first prizes, has found time between flights to realize the captivating idea of Flemish farm buildings. With its roofs loaded with snow and its little windows lighted in the night, it looks like the setting of a Christmas tale. And, really, in the most profound meaning of the word, does it not concern the human and national nativity? And the habitation of the blacksmith, as the likeness is engraved by M. Pierre Patout, treated in old timber work, is of the most cordial and ample attraction. What a magnificent framing of this robust shed in the style of an ancient market house! At the very sight of it one hears the song of the hammer, and the perfume of the scorched hoof rises in the air. Many others, who will excuse me, should be noticed. All, in designing houses, created poems, ballads of the new era, in which occur reminiscences of the past. Yet adapted, with a light touch, to modern formulas, they have gathered and continued the traditions of the old provincial architecture, and this religious anxiety that guided them lends to the ensemble of their researches a ravishing harmony, a family resemblance.

And it is also a song of action and grace, which under a serene sky, among reborn orchards, over the breathing village, declaims the cheerful and youthful house with roofs mounting to happiness. Oh, the touching promise of the Alsatian chimneys, columns having for bushy capitals the nest of storks! Thus the ruin, alas, when forgotten, seems already to belong to ancient history. The stones of mutilated France have changed their voices. Yesterday they were weeping, to-day they sing.

But on the day, when to the repatriated will finally be given over the pleasant and fair dwellings newly adorned, how necessary it will be that those who there take up their abode shall endeavor to feel their charm and their moral value, all that they hold of devotion, of sacrifice, or right, all the loving attention and anxious maintenance which they demand. These are sanctified houses, uncommon, beautiful, and it will be an impiety to allow them to decay and deteriorate. It is therefore necessary to care for them, in order that all the good artists, who conceived them and offered them to their native land in so fine a spirit, may not in the future have heavy hearts, finding them vilified, misunderstood, and soiled. A great and useful education to undertake, and one which will forge to the front as one of the pressing needs of to-morrow.

This vast and compelling question of the re-establishment of our devastated provinces is an inexhaustible thing. The depth of its perspectives extends in every direction. I have only been able, to my great regret, to put down in passing some reflections on moral-

ity, and forced to terminate, I perceive that I have said almost nothing. Fortunately, others better prepared and instructed, of a more scholarly technique, and prepared by conscientious study, have set forth and treated in all its aspects the problem that in this article overwhelms me. I can do nothing better in concluding than to recommend to those of my readers desirous to inform themselves more fully the excellent work that, under the significant title, 'The Homes of France,' has just been published by M. Leandre Vaillat, apostle of this fundamental thought—each locality its characteristic house. He was one of the first and devoted organizers of the great movement of which we can appreciate to-day the precious results. Composed of serious studies so favorably mentioned in 'Le Temps,' the book, written by a learned and refined artist and a charming writer, is the most agreeable and scholarly labor consecrated to this great work.'—'Journal of the American Institute of Architects.'

ONE WAY OF SECURING CONTRACTS.

A. Wiseman, an electrical contractor in California, was a hustler, and his work was a combination of good quality and reasonable prices. He had hundreds of competitors—or did when he decided to "label his work," but since then most of them have faded away (some of them, he writes, are now working for him), and what's the reason?

Well, he figured it out thus: Every contract he secures he puts a sign on to show the public that he is on the job; that it was only another structure he was wiring. One sign, plus good work and reasonable prices, enabled him to land another, and to-day it is a foregone conclusion that if anyone is going to have electrical work done A. Wiseman will have a chance at it.

Now take this home to yourself—be A. Wiseman in your community. No matter whether you supply the brick, the lumber, the mantels, the glass, the millwork, the roof or the waterproofing of the cellar—no matter whether you are the architect, the contractor, the stairbuilder or plumber, tell the passerby that you are "on the job"—that is, if you are proud enough of your work—willing that it or the material you are selling should bear inspection. There is nothing more dignified or elegant than these 2x3 feet signs manufactured by the Independent Printing Companies of U. S. at Washington, D. C., and which sell for about 15c. each. They are well made of flexible hemp fibre, better than cardboard, cloth or metal—not greasy, but absolutely weatherproof. A sample is obtainable upon request.

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DUCK SHOOTING and COMMON SENSE

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If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

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In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

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Residences (2 pairs), Frankford, Philadelphia. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, George Rimer, 4842 Hawthorne street, Frankford. Brick, 3 stories, 60x21 feet, shingle roof, hot water heating, electric lighting. Owner is ready for bids.

Nurses' Quarters (add.), No. 2946, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story and 5 stories, 20x80 feet, and two wings, 20x20 feet, 20x155 feet, and two wings, 23x56 feet and 18x20 feet, ready roof, cement floors, steam heating, electric lighting, waterproofing. Owners taking bids, due May 6th. Wark-Yardley Co., 1737 Filbert street, and Conneen Const. Co., 1737 Filbert street, are figuring.

Apartments (alt. and add.), 218 South Fifty-second street, Philadelphia. Architect, H. E. De Hoff, 48 South Sixty-first street, Philadelphia. Owner, David Greenboro, on premises. Brick, third story addition, 15x18 feet, slag roof, hardwood floors, steam heating, electric lighting, tile work. Architect will be ready for bids in a few days.

Power House and (2) Transformer Houses, Spec. 2952, Philadelphia. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Too early for details.

Residences (12), Seventy-first and Gray's avenue, Philadelphia, \$36,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Calvin W. Rogers, 237 South Forty-ninth street, Philadelphia. Brick, (6) 16x32 feet and (6) 14x38 feet, slag roof, stone foundations, hot air heating, combination lighting, pine floors. Owner will build and is taking sub-bids.

Factory (add.), Sixteenth and Hamilton streets, Philadelphia. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, Wm. Sellers & Co., Inc., on premises. Brick, concrete and terra cotta, 5 stories, 24x44 feet, slag roof, cement and maple floors, metal lath, rolled steel sash, fire door (heating, lightin and plumbing reserved). Architect has received bids.

Store (alts. and add.), northeast corner of Fifty-second and Walnut streets, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut st., Philadelphia. Owner, Henry Felt, Fifty-second and Girard avenue, Philadelphia. Brick, 2 stories, 40x50 feet, slag roof, yellow pine floors, hot water or steam heating, electric lighting. Plans in progress. Will take bids in one week.

Garage (alts. and add.), 1821-23 Sansom st., Philadelphia. Architect, private plans. Owner's name withheld. Brick and stucco, 1 story and basement, 26x80 feet, slag roof, cement floors, iron stairs (heating and lighting reserved). Hogg Const. Co., 1634 Sansom street, takin gsub-bids.

Store and Residence, 517 South Fifth street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Joseph J. Cohen, 523 South Fifth street, Philadelphia. Brick, 3 stories, consists of general interior alterations, rear addition, flush bulks, etc. Plans in progress. Owner will take bids in one week.

Residence (alts.), West Johnson street, Germantown. Architect, private plans. Owner's name withheld. Brick, 3 stories, mill work, new porch, tin roof, pine floors. Wm. J. Grubler Co., 219 East High street, taking sub-bids.

Garage, Sixteenth street, below Columbia avenue, Philadelphia. Architect, Samuel D. Milner, Crozer Building, Philadelphia. Owner, Wm. Boland, 1730 North Twenty-fifth street, Philadelphia. Brick, 1 story, 23x79 feet, slag roof, cement floor, electric lighting, hollow metal skylights. Owner taking bids, due as soon as possible. A. R. Raff Cont. Co., 1635 Thompson street, and Frank G. English, 1610 North Carlisle street, are figuring. Architect is also taking sub-bids, due as soon as possible.

Garage and Warehouse, Passyunk avenue and Webster street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, 3 stories, 16x65 feet, slag roof, stone foundations, steam heating, electric lighting, yellow pine floors, metal ceilings. Plans in progress. Architect will take bids in one week.

Factory (int. and ext. Alts.), west side of Seventh street, between South and Bainbridge streets. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, 3 stories, 46x90 feet, new front, tile and brick, electric lighting, slag roof, pine floors (heating reserved). Plans in progress. Architect will take bids in one week.

Office Building and (8) Individual Garages, Sixth and Rockland streets, Philadelphia, \$10,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Wm. A. Lechler, Broad and Erie avenue, Philadelphia. Lessee, Walter Brinton, Fifth Survey District, Philadelphia. Brick and stone, 1 story and basement, 35x48 feet and 35x46 feet, slag roof, hot water heating, electric lighting, hollow metal skylights, roof ventilators, cement and pine floors, tile work. Owner is taking sub-bids.

Garage, 1718-20-22 Wood street, Philadelphia. Architect, Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owner, J. Edw. Lutz, 240 North Seventeenth street, Philadelphia. Brick, 1 story, 45x34 feet, slag roof, cement floors, stone foundations, electric lighting, hollow metal skylights (heating reserved). Architect and owner have received bids.

Shed, Fifteenth and Washington avenue, Philadelphia. Architect, private plans. Owners, U. S. Marine Corps, Q. M. Dept., 1100 S. Broad street, Philadelphia. Concrete, brick and steel, 1 story, 94x136 feet, corrugated iron roof, cement floors, electric lighting, roll-

ed steel sash, fire doors. Owners have received bids.

Naval Training Camp Extension, L 2924, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Bureau of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 1 and 2 stories, 33 buildings, various sizes, 3 ply ready roofs, yellow pine floors, steam heating, electric lighting, plumbing, painting, plastering, glazing and hardware, ornamental iron work. Owners have received bids.

Caretaker's Lodge House, Bartram Gardens, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, room 113, City Hall, Philadelphia. Brick, 2 stories, 28x30 feet, slate roof, hot air heating, electric lighting, yellow pine floors. Lowest bidders: W. O. Springer, 1624 Latimer st., \$5,673; Hogg Const. Co., 1624 Sansom street, \$5,777; Robbins Cont. Co., Lafayette Building, \$5,938.

School (extension), Oak Lane, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Oak Lane Country Day School, Oak Lane, Philadelphia. Brick or frame and stucco, 1 story, 40x222 feet, slate roof, vapor heating, electric lighting, maple or pine floors. Plans in progress. Will take bids in a week.

Residences (30), 4900 to 4060 North Ninth street, \$99,500. Architect, private plans. Owners, W. Fischer & Sons, Ninth and Rockland streets, Philadelphia. Brick, 2 stories, 15x48 feet, slag roof, pine floors, hot water heating, combination lighting. Owners will sub-let.

Residence and Garage, Eleventh and Wingo-hocking streets, Philadelphia. Architect, David Levy, 935 Hamilton street, Allentown, Pa. Owner, Max Weinroth, 2980 Market st., Philadelphia. Stucco and hollow tile, 2½ stories, 40x51 feet, tile roof, concrete floors, hollow tile, metal lath (tile work, hardware, heating and lighting reserved). Architect has received bids.

Recreation Park, Fifty-seventh and Haverford avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, City of Philadelphia, Board of Recreation, 587 City Hall. Cement coping, iron fence and gates, wire screen, brick work, blue stone curb (plumbing separate bids). Architect has received bids.

Residence and Garage, 6435 Woodbine ave., Philadelphia, \$25,000. Architect, W. Gordon Smith, 2135 North Sixty-third street, Philadelphia. Owner, John S. Gustine, Jr., 6337 Woodbine avenue, Philadelphia. Brick and stucco, 2½ stories, 53x35 feet; garage, 22x25 feet, tile roof, hardwood floors, steam heating, electric lighting, tile work. Plans in progress.

Store and Residence (alts. and add.), 517 Spruce street, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia.

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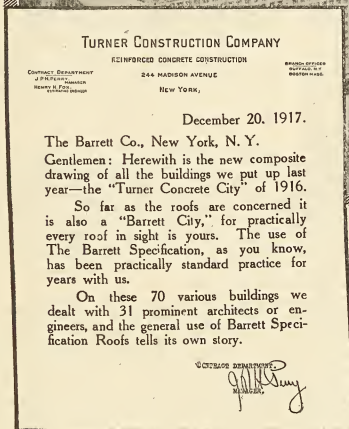
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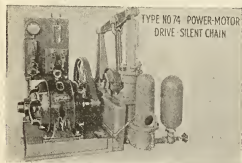
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Owners, David Salkind & Co., 226 Race street, Philadelphia. Brick, 3 stories, 15x20 feet, slag roof, hot water heating, electric lighting, plumbing, yellow pine floors. Architect taking bids, E. J. Kreitzburg, 1345 Arch street, and Matthew Schmid, 1308 North Sixth street, are figuring.

Nurses' Quarters (add.), No. 2946, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story and 5 stories, 20x80 feet, two wings, 20x20 feet and 20x155 feet, two wings, 23x56 feet and 18x20 feet, ready roof, cement floors, steam heat, electric light, waterproofing. Owners taking bids, due May 6th. Wills-Ludwick Co., 34 South Seventeenth street, and Thos. C. Trafford, 1613 Sansom street, additional bidders.

Shed, Fifteenth and Washington avenue, Philadelphia. Architect, private plans. Owners, U. S. Marine Corps, Q. M. Dept., 1100 S. Broad street, Philadelphia. Concrete, brick and steel, 1 story, 94x136 feet, corrugated iron roof, cement floors, electric lighting, rolled steel sash, fire doors. Lowest bids submitted by Lam Building Co., 1001 Wood street, \$22,565; Wills-Ludwick Co., 34 South Seventeenth street, \$22,635.

Store, Tea Room and Hotel (alts. and add.), 219 South Broad street, Philadelphia. Architect, Carl P. Berger, 1416 South Penn Square, Philadelphia. Owner, W. E. Adams, on premises. Brick, 4 stories, 33x130 feet, slag roof, steam heating, electric lighting, tile work, hardwood floors, plumbing, metal ceilings. Architect taking bids, due May 7th. A. L. Fretz & Son, Hoed Building; Raith Const. Co., 304 Master street; J. Sims Wilson Co., 1125 Brown street; E. J. Kreitzburg, 1345 Arch street; H. E. Grau Co., 1707 Sansom street; Evans Const. Co., 9 South Eighteenth street; F. L. Hoover & Son, 1023 Cherry street, and Chas. C. Pace, Merion, Pa., are figuring.

Delivery Building, Seventh and Filbert sts., Philadelphia. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Lit Brothers, Eighth and Market streets, Philadelphia. Brick and reinforced concrete, 1 story, 159x42 feet and 80x112 feet, corrugated galvanized roof, concrete floors, electric lighting, rolled steel sash, waterproofing. Archi-

teets taking bids, due April 30th. Warren-Moore Co., Colonial Trust Building, and Jacob Myers & Sons Co., Witherspoon Building, are figuring.

Machine Shop, 1126-28 Vine street, Philadelphia. Architect, private plans. Owners, Philadelphia Gear Works, 1120-24 Vine street, Philadelphia. Brick, 1 story, 36x96 feet, slag roof, stone foundations, concrete floors, hollow metal sash and skylights (lighting reserved). Standard Const. Co., 1713 Sansom street, is taking sub-bids, due as soon as possible.

Residences (2), Belgrade, east of Westmoreland street. Architects, Durham Bros., 26 S. Fifteenth street, Philadelphia. Owner, Alex. Zdzaniewicz, 3238 Livingston street, Philadelphia. Brick, 2 stories, 16x56 feet, slag roof, hot air heating, gas lighting. Owner is taking bids.

Temporary Storage Buildings "A" and "E" and Railroad Track, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of DeWitt Webb, Public Works Office, Washington, D. C. Frame, Building "A" No. 2641, 1 story, 200x100 feet; Building "E" No. 2640, 1 story, 800x60 feet; No. 2575, 4,500 feet track and 1,800 square yards of concrete, ready roof, cement floors, roof ventilators. Owners taking bids, due May 2nd. Wark-Yardley Co., 1737 Filbert street; P. L. Hoover & Son, 1023 Cherry street, and Thos. Reilly, 1616 Thompson street, Philadelphia, are figuring.

Garages (14), 2612-14 West Huntingdon st., Philadelphia. Architect, H. M. Hokanson, 1713 Sansom street, Philadelphia. Owner's name withheld. Brick, 1 story, 38x120 feet, slag roof, cement floors, metal lath, electric lighting, stone foundations (heating reserved), fire doors. Barclay White & Co., 1713 Sansom street, is taking sub-bids, due as soon as possible.

Store Building (alts.), southeast corner of Broad and Wallace streets, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Kahn & Greenberg, Morris Building, Philadelphia. Consists of metal lath and plaster partitions, mill work, maple floors, metal ceilings, steam heating and plumbing extensions, electric work, elevator repairs. Plans completed. Owners are ready for sub-bids.

Building (alts.), 134 South Second street, Philadelphia. Architect, private plans. Owners, U. S. Government, Treasury Department, care of Appraisers, Philadelphia. Brick, 6 stories, 100x150 feet, electric lighting, steam heating, mill work, stone work, painting, plumbing and glazing. Owners taking bids, due May 8th, at office of Custom House Custodian. W. W. Anstine & Co., 1218 Filbert street; Lam Building Co., 1001 Wood street, and H. H. Wehmeyer, 509 West Cumberland street, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Building (alts.) (interior), Broad and Cherry sts., \$150,000. Architect, Horace Trumbauer, Land Title Building, Philadelphia. Owners, Gomery & Schwartz, on premises. Lessees, Emergency Fleet Corporation, on premises. Consists of 20,000 feet of partitions, 168 office, 36 working spaces, plumbing, electric work, painting, plastering, glazing, linoleum. Contract awarded to Cramp & Co.,

Denekla Building, Philadelphia.

Car Barn, Machine Shop, Paint and Carpenter Shop, Office and Tool Room, Penrose Ferry road and Ft. Mifflin road, Philadelphia, \$35,000. Architect, J. Horace Frank, Real Estate Trust Building, Philadelphia. Owners, Phila. Railways Co., Land Title Building, Philadelphia. Brick and concrete, 1 story mill construction; 150x52 feet, 117x35 feet,

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and 80x17 feet, slag roof, cement, wood block and yellow pine floors, hollow tile (steam heating and electric lighting reserved), rolled steel sash and skylights, fire doors, screens. Contract awarded to Wm. Steele & Sons Co., 34 S. Fifteenth street.

Convenience Station, Wm. Lanier Park, Twenty-ninth and Tasker streets. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, Dept. of Public Works, City Hall, 113, Philadelphia. Brick, 1 story, 24x24 feet, slate roof, cement floor. Contract awarded to Geo. Dobbins, 4200 Chester avenue, Philadelphia, \$3,197.

Garage and Factory, Wayne and Bristol sts., Philadelphia, \$12,000. Architect, private plans. Owners, F. W. Maurer & Son, on premises. Brick, 2 stories, 24x95 feet, slag roof, pine and cement oors (heating reserved). Contract awarded to Robt. Beatty & Bro., 2321 E. Fletcher street.

Garage, 2527-31 N. Broad street, Philadelphia, \$25,000. Architect, private plans. Owner, L. S. Hall, 800 N. Carlisle street, Philadelphia. Brick and concrete (slow burning construction), 1 story, 57x150 feet, slag roof, stone foundations, steam heating, electric lighting, rolled steel sash and skylights, ornamental iron work, roof ventilators, cement floors (gasoline storage system reserved). Contract awarded to Henry P. Schneider, 3717 Old York road.

Residence (alt. and add.), 108 W. Johnson st., Philadelphia. Architect, Bart Tourison, Land Title Building, Philadelphia. Owner, Wm. H. Scott, care of Cutter Electric Co., Nineteenth and Hamilton streets, Philadelphia. Brick, 1 story addition, 12x16 feet, slate roof, new partitions, hot water heating, electric lighting. Contract awarded to E. J. Tourison, 20 Westview avenue, Germantown.

Factory, Thirtieth and Locust streets, Philadelphia, \$100,000. Architect, private plans. Owners, Morris Wheeler & Co., on premises. Brick, 1 story, 132x316 feet, slag roof, cement floors, electric lighting, rolled steel sash. Contract awarded to Wm. Steele & Sons Co., 34 S. Fifteenth street.

Hospital (add.), Fifth and Wilder streets, Philadelphia, \$15,000. Architects, Magaziner & Eborhard, 603 Chestnut street, Philadelphia. Owners, Mt. Sinai Hospital, on premises. Brick and concrete, wing 1 story, new elevator shaft. Contract awarded to Wm. Linker Co., 831 Cherry street, Philadelphia.

Store Building (alts. and add.), 507 to 517 Commerce street and 510 to 524 Cuthbert st., Philadelphia. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owners, Supplement Hardware Co., on premises. Reinforced concrete and brick, 6 stories, 23x12 feet, metal lath, hollow metal skylights,

Bell Phone: Market 3158

Keystone Phone: Main 174

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fire doors. Contract awarded to H. H. Burrell, 206 South Quince street, Philadelphia.

Store and Residence (alts.), northeast corner Fourth and Bainbridge streets. Architect, L. W. Levin, 2434 South Eighth street, Philadelphia. Owner, H. Faden, on premises. Consists of changing interior of store, electric lighting, tile and marble work, flush bulks, leaded glass, mill work, metal ceilings. Contract awarded to Michael Kirschner, 421 Snyder avenue.

Garage (alts. and add.), Aspen and Brooklyn streets, Philadelphia. Architects, Polson & Stanton, 1325 Walnut street, Philadelphia. Owner, A. S. Butz, 745 North Forty-first street, Philadelphia. Brick, 2 stories, 80x80 feet, reinforcing floors, cement work, hot water heating, electric wiring, electric elevator. Contract awarded to Warren E. Biscoe, 3954 Ludlow street.

Store (alts.), Seventeenth and South streets, Philadelphia, \$5,000. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owners, Sternberg Bros., 1644 South street, Philadelphia. Brick, 4 stories, repairs to roof, pine floors, flush bulks, plastering, plumbing, mill work (heating and lighting reserved). Contract awarded to B. Bornstein, 1510 North Franklin street.

Warehouse, Aramingo and Huntingdon avenues, \$10,000. Architect, private plans. Owners, John T. Lewis & Sons Co., Lafayette Building, Philadelphia. Brick and concrete, 1 story, 181x108 feet, slag roof, cement floors, electric lighting, rolled steel sash, fire doors. Contract awarded to Turner Concrete Steel Co., 1713 Sanson street.

Residences (4), 1201-07 Wakeling street, Philadelphia, \$22,000. Architect, private plans. Owners, C. West & Co., Oxford avenue and Wakeling street. Brick, 3 stories, 16x35 feet, slate and tin roof, pine floors, stone foundations, hot air heating, combination lighting,

tile work. Owners are ready to start work.

Residences (14), 4602-08 Warnock street, Philadelphia, \$49,000. Architect, private plans. Owner, Wm. J. Baltz, 709 Butler street, Philadelphia. Brick, 2 stories, 15x44 feet, slag roof, stone foundations, hot air heating, combination lighting, pine floors. Owner has started work.

Y. W. C. A. Building (alts.), 115-17 South Nineteenth street, Philadelphia. Architects, Morris & Erksine, 1420 Chestnut street, Philadelphia. Owners, National Y. W. C. A., War Work Council, care of architects. Brick, 4 stories, 80x80 feet, general interior alterations, carpentry, plastering (plumbing reserved). Contract awarded to R. C. Ballinger & Co., 218 North Thirteenth street.

Warehouse, Thirtieth and Chestnut streets, Philadelphia, \$60,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Schuyllkill Warehouse Co., on premises. Reinforced concrete, brick and stone, 2 stories and basement, 80x79 feet, slag roof, cement floors, rolled steel sash and skylights, fire doors, ornamental iron work, safety treads, waterproofing, (heating, plumbing, lighting and sprinklers reserved). Contract awarded to Monaghan & Losse, Inc., 3016 Chestnut street.

Residences (4), 1913-19 Haworth street, Philadelphia, \$10,000. Architect, private plans. Owner, Elizabeth Osborne, 5017 Duffield street, Philadelphia. Brick and frame, 2 stories, 15x25 feet, slag roof, stone foundations, hot air heating, electric lighting, pine floors. Contract awarded to George R. Osborne, 5017 Duffield street.

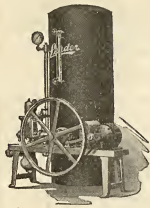
Dwellings (2), West Nixon and Fountain streets, Manayunk, \$5,000. Architect, private plans. Owners, Philadelphia Paper Manufacturing Co., Manayunk, Philadelphia. Brick, 2 stories, 16x30 feet, slag roof, hot air heating, gas lighting. Contract awarded to Barclay White Co., 1713 Sanson street.

PENNSYLVANIA**Construction News**

Store (alts.), Wilkes Barre, Pa. Architect, Frank Sahn, Wilkes Barre, Pa. Owners, McWilliams Department Store, Wilkes Barre, Pa. New front, 1 story, metal bulks. Architect ready for bids.

Residences (2), Shenandoah, Pa. Architect, Geo. Walsh, Coal Exchange Building, Wilkes Barre, Pa. Owners, Locust Mountain Coal Co., Shenandoah, Pa. Frame, 2 stories, 28x24 feet, slate roof, pine floors, electric

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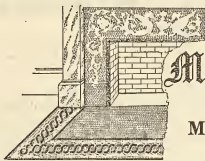
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Residence, Exeter, Pa. Architect, J. J. Howley, Scranton, Pa. Owner, Geo. Busha, Exeter, Pa. Frame, 2½ stories, 26x43 feet, slate roof, steam heating, pine floors, electric lighting. Plans in progress.

School (add.), Archbald, Pa. Architect, Louis Hancock, Mears Building, Scranton, Pa. Owners, School Board of Archbald, Archbald, Pa. Brick, 2 stories, 16x90 feet, shingle roof, pine floors. Architect taking bids. Washburn & Williams, Peck Lumber Co., Dickson Lumber Co., Howard & Stender, all of Scranton, Pa., are figuring.

Store Building, Nanticoke, Pa. Architect, A. Reilly, Bennett Building, Wilkes Barre, Pa. Owner, name withheld. Brick, 2 stories, 34x47 feet, slag roof, pine floors, electric lighting. Plans in progress.

Cottage, Harvey's Lake, Pa. Architect, Geo. Schroeder, Wilkes Barre, Pa. Owner, name withheld. Frame and stone, 1½ stories, 28x50 feet, shingle roof, pine floors, electric lighting, tile work. Plans in progress. Architect will take bids May 6th.

Schools (2), Hazleton, Pa. Architect selected, Edgar Joralemon, Buffalo, N. Y. Owners, School Board of Hazleton, Hazleton, Pa. One to cost \$150,000 approximately, 36 rooms, the other to cost about \$24,000. Architect selected. Plans in progress.

Houses (100), Chester, Pa. Architect, private plans. Owners, Sun Shipbuilding Co., Chester, Pa. Brick and frame, 2 stories, 18x36 feet. Owners will build.

Residence, Centerville, Pa. Architect, E. O. May, Dupont Building, Wilmington, Del. Owner, name withheld. Brick and frame, 2½ stories, shingle roof, vapor or hot air heating, electric lighting, hardwood floors. Plans in progress.

Church, Chester, Pa. Architect, not selected. Owners, Methodist Episcopal Church, care of Dr. C. E. Gaul, 330 Kerlin street, Chester, Pa. Work contemplated.

Church, Chester, Pa. Architect, not selected. Owners, First Presbyterian Church, care of Rev. W. R. Houston, 4 W. Eighth st., Chester, Pa. Work contemplated.

Residence, Reading, Pa. Architect, A. A.

Ritcher, Reading, Pa. Owner, name withheld. Hollow tile and stucco, 2½ stories, 60x64 feet, Spanish tile roof, vapor heating, electric lighting, tile and marble work, hardwood floors. Preliminary plans completed.

Apartment House (alt. and add.), Reading, Pa. Architect, W. A. Fink, 426 Franklin st., Reading, Pa. Owner, W. W. Stewart, Reading, Pa. Brick, 3 stories, 72x32 feet. Preliminary plans in progress. Too early for details.

Cow Barn, Muhlenberg, Pa. Architect, Fritz Ehrsam, Reading, Pa. Owner, Mrs. Kathryn Kramer, 742 Centre avenue, Reading, Pa. Frame, hollow tile and stucco, 2 stories, 175x40 feet, shingle roof, concrete and wood floors. Plans in progress.

Bungalow, Stowe, Pa. Architect, Arthur Kepner, Pottstown, Pa. Owner, Harry Leven-good, Stowe, Pa. Frame, 1½ stories, 20x30 feet, shingle roof, pine floors, hot air heating. Plans in progress.

High School (interior work), Lebanon, Pa. Architect, A. A. Ritcher, Reading, Pa. Owners, School Board of Lebanon, care of E. H. Donley, secretary, Lebanon, Pa. Consists of new yellow pine floors, hardware, painting, metal lath. Architect taking bids, due May 3d. Beard Const. Co., Reading, Pa., is figuring.

Building No. 37, Reading, Pa. Architect, S. Muhlenberg, Reading, Pa. Owners, Carpenter Steel Works, Reading, Pa. Brick and steel, 1 story, 146x135 feet, Carey roof, concrete floors, hollow metal sash and skylights. Architects taking bids. Beard Const. Co. and Daniel Hunter, both of Reading, Pa., are figuring.

Factory, Clifton Heights, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Clifton Yarn Mills, Clifton Heights, Pa. Brick, 2 stories and basement, 46x130 feet, slag roof, electric lighting. Plans in progress. Architect will take bids in a few days.

Store, Clifton Heights, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Louis Hensel, care of architect. Sketches in progress. Too early for details.

Horticultural Laboratory, Doylestown, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, National Farm School, Doylestown, Pa. Brick and

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stucco, 1 story, 20x50 feet. Sketches being drawn. Too early for details.

Residence (alt. and add.), Cynwyd, Pa. Architect, Wesley L. Blithe, 608 Chestnut st., Philadelphia. Owner, Mrs. Rudolph Blankenburg, Cynwyd, Pa. New porch, interior and exterior alterations, plumbing, plastering, painting, electric lighting, hot water heating, tile work, slate roof. Architect will take bids in a few days.

Nurses' Home, Phillipsburg, Centre County, Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Phillipsburg Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, lighting and plumbing separate bids). Revised plans in progress.

Stores and Residences (2), Bristol, Pa. Architect, private plans. Owner, Louis Elfman, Land Title Building, Philadelphia. Brick, 2 stories, 19x54 feet, slag roof, pine floors, electric lighting. Owner is taking bids. Ketcham & McQuade, 1029 Brown street, are figuring.

Residence, St. Mary's Pa. Architects, Newman & Harris, 1123 Broadway, New York City. Owner, Frank A. Kaul, St. Mary's, Pa. Brick, limestone and terra cotta, 2½ stories, 53x70 feet, slate roof, stone foundations, steam heating, electric lighting, tile and marble work, hardwood and yellow pine floors, metal lath, ornamental iron work (heating reserved). Architects taking bids, due May 3rd. James H. Wells, Otis Building, Philadelphia, is figuring.

Summer House, Jenkintown, Pa. Architect, private plans. Owner's name withheld. Frame, 1 story, 16x16 feet, shingle roof. Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia, is figuring.

Factory, Wissinoming, Pa. Architect, private plans. Owner's name withheld. Brick, 1 story, 63x200 feet, stone foundations, slag roof, cement floors, rolled steel sash and skylights, fire doors. Beatty & Bro., 2321 East Fletcher street, is taking sub-bids, due May 3rd.

Passenger Station, Edgely, Pa. Architect, Wm. H. Cookman, Broad Street Station, Philadelphia. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, 1½ stories, 39x24 feet, slate roof, pine floors, electric lighting, metal lath. Owners taking bids, due May 2nd. W. J. Morris, Broad Street Bank Building, Trenton, N. J.; Frank Snyder, Cornwells, Pa.; J. H. Page, Cornwells, Pa.;

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Frank Vandergrift, Eddington, Pa.; S. W. Mather & Son, Trenton, N. J.; Fred R. Parker, Trenton, N. J.; Fred H. Ewald, Morrisville, Pa.; N. K. Freas, Andalusia, Pa., are figuring.

Building, near Edgeley, Pa. Architect, Harry Hill, 40 West State street, Trenton, N. J. Owners, Wm. Woodhouse Chain Products Co., Trenton, N. J. Concrete block and frame, 1 story, 104x40 feet and wing 40x80 feet, tin roof, plumbing, heating and painting. Owner taking bids. Burton & Burton, American Mechanics' Building, Trenton, N. J., and Rust Eng. Co., Pennsylvania Building, Philadelphia, additional bidders.



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PENNSYLVANIA Contracts Awarded

Residence, Dunmore, Pa. Architect, J. J. Howley, Traders Bank Building, Scranton, Pa. Owner, M. J. Dempsey, Dunmore, Pa. Frame or stucco, 2½ stories, 32x38 feet, slate roof, steam heating, electric lighting, pine floors. Contract awarded to M. Raylor, Dunmore, Pa.

Market House, Wilkes Barre, Pa. Architects, McCormick & French, Wilkes Barre, Pa. Owners, East Market St. Association, Wilkes Barre, Pa. Brick, 1 story, 90x242 feet and 38x70 feet, composition roof, concrete floors, electric lighting, rolled steel sash. Contract awarded to John James, Wilkes Barre, Pa.

Residences (46), Boarding Houses (2) and Store Building, Lansford, Pa. Architect, Geo. Welsh, Coal Exchange Building, Wilkes Barre, Pa. Owners, Lehigh Coal & Navigation Co.,

Lansford, Pa. Hollow tile and stucco, 2 stories, 23x24 feet, slate roof, pine floors, electric lighting. Contract awarded to Dodson Realty Corp., Bethlehem, Pa.

Store (alt. and add.), Penn ave., Scranton, Pa. Architects, Morris & MacHale, Barr Building, Scranton, Pa. Owner, W. H. Coons Co., Penn. avenue, Scranton, Pa. Brick, 1 story, mill work, composition floors, electric lighting, marble work. Contract awarded to Hower & Stendor, Scranton, Pa.

Stores and Apartments (4), Chester, Pa. Architect, private plans. Owner, Hyman Stein, Chester, Pa. Brick, 2 stories, 18x58 feet, slag roof, pine floors, hot air heating, electric lighting. Contract awarded to S. A. Hewes & Son, Chester, Pa.

NEW JERSEY Construction News

Medicine Factory, Camden, N. J. Architect, private plans. Owners, S. B. Goff & Sons Co., 217 S. Second street, Camden, N. J. Brick, 1 and 2 stories, 36x150 feet, slag roof, wood floors, steam heating, electric lighting, hollow metal skylights, fire doors. Plans in progress.

Signal Tower, Oil House and Septic Tank, White House, Readington Township, Hunterdon Co., N. J. Architect, private plans. Owners, Central RR. of New Jersey, care of Chief Engineer, 143 Liberty street, New York City. Brick, 2 stories. Owners taking bids. Beard Const. Co., Reading, Pa., is figuring.

Storehouses (30), No. 2884, Lake Denmark, N. J. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards & Docks, Navy Dept., Washington, D. C. Brick, hollow tile and steel, 1 and 2 stories, 200x60 feet, slag roof, pine floors, hollow tile, rolled steel sash, fire doors, roof ventilators, dampproofing, wire work (heating and lighting reserved). Owners have received bids.

Canning Factory, Vincentown, N. J. Architect, Wm. Kleeman, Trenton, N. J. Owners, Morris Canning Co., Vincentown, N. J. Frame,

1 story, 70x30 feet, rubberoid roof, cement floors. Plans in progress.

School, Juliustown, Burlington County, N. J., 87,000. Architect, Harry Hill, Trenton, N. J. Owners, School Board of Juliustown Township, care of Frank Bosarth, Clerk, R. F. D., Burlington, N. J. Frame, 1 story, 75x40 feet, roofing undecided, pine floors. Plans in progress.

Houses (907), Haddon, Camden County, N. J., \$2,500,000. Architect, Electus D. Littlefield, 477 Fifth avenue, New York City. Owners, U. S. Govt., care of Shipping Board, Washington, D. C. Frame, stucco and brick, 2 stories, various sizes, slag, tin and composition roofs, stone foundations, hot air heating, electric lighting, pine floors. Contract awarded to Tidewater Building Co., 16 E. Thirty-third st., New York City.

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Miscellaneous Construction News

Development of 64 Acres, Front and Union sts., Wilmington, Del., \$2,500,000. Architects, Ballinger & Perrot, Seventeenth and Arch sts., Philadelphia. Town Planner, John Nolen, Cambridge, Mass. Owners, U. S. Shipping Board, Washington, D. C. Will include 550 residences, temporary quarters for 800 single men; 40 apartment buildings for families; school, community centre, boulevard, paving, grading, etc. Plans in progress. Too early for details. Architects have entire charge, and will have plans completed in a few weeks.

Residence (alts.), Seventeenth and Greenville avenue, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, name withheld. Brick, 2½ stories, general alterations, plastering, mill work, electric lighting. Plans in progress.

Residence, Greensboro, N. C. Architects, Charles Barton Keen, Bailey Building, Philadelphia. Owner, A. W. McAlister, Greensboro, N. C. Brick and stucco, 2½ stories, 50x128 feet, slate roof. Revised plans in progress.

Warehouse, Provincetown, Mass. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Sklaroff & Son, 712 S. Second street, Philadelphia. Frame, 3 stories, 66x88 feet, shingle roof, electric lighting. Plans in progress.

Buildings (5) and Attendants' Quarters (Repairs), Reedy Island, Del. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Owners taking bids, due May 27th, at 3 P. M. Drawings and specifications may be obtained from Supervising Architect or custodian of the station.

Attendants' Quarters and Remodeling of 12 Buildings, Quarantine Station, Craney Island, Cape Charles, Va. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Owners taking bids, due May 16th, at 3 P. M. Plans and specifications may be obtained from Supervising Architect or custodian of station.

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MARYLAND Construction News

Schools (2), College Park, Md., and Lanham, Md. Architect, Bart Tourison, Land Title Building, Philadelphia. Owners, Prince George's Co. School District, College Park, Md. Brick, 1 story and basement, 113x36 feet, (4) classrooms, slate roof, 1 pipe steam heating, cement and maple floors, rolled steel sash, sliding doors, slate work. Plans completed. Architect will be ready for sub-bids in a week.

Y. M. C. A. Building (alts.), Charles and Lexington streets, Baltimore, Md. Architect, George P. Morris, Title Building, Baltimore. Owners, Y. M. C. A., care of architect. Consists of general renovation, brick work, mill work, stone trim, electric lighting, slag roof, fire escapes, ornamental iron work, metal ceilings, hollow metal sash and skylights, hollow tile, metal lath, tile, marble, slate or terrazzo work, composition and hardwood floors, dumb waiters, flush bulks, fireproofing and damp-proofing. Plans completed. Architect is ready for sub-bids on all lines.

Apartment, Walbrook, Baltimore, Md. Architect, Stanislaus Russell, Brookfield and Lake Drive, Baltimore. Owner, E. H. Sadler, 635 Equitable Building, Baltimore. Brick and steel, slow burning construction, 3 stories, slag roof, steam heating, combination lighting, fire

escapes, fireproofing, hollow tile, terrazzo and tile work, dumb waiters, plumbing, fireproofing, plastering and painting. Architect taking bids, due May 6th. B. F. Bennett Building, Consolidated Eng. Co., Cogswell-Koether Co., C. W. Little & Sons, all of Baltimore, Md., are figuring.

Bath House (alts.), 1114 East Lombard st., Baltimore, Md. Architects, Callis & Callis, 2055 Kennedy avenue, Baltimore. Owner, Harris Stromwater, 1223 East Lombard street, Baltimore. Plumbing, steam heating, tile and terrazzo work. Owner is taking bids.

Factories (2), Lendenhall and West streets, Baltimore, Md. Architect, private plans. Owners, F. X. Ganter Co., on premises. Brick, 3 stories, 70x200 feet and 65x123 feet, slag or tin roof, steam heating, electric lighting, hollow metal skylights, elevators. Owners taking sub-bids.

Shed, Key Highway and B. and O. R. R., Baltimore, Md. Architect, private plans. Owners, McArdle & Cooney, 8 East Lombard st., Baltimore. Steel or galvanized iron, corrugated roof, 30x156 feet. Owners taking bids. C. P. Purden & Co., and Trussed Concrete Steel Co., Baltimore, Md., are figuring.

MARYLAND Contracts Awarded

Bottling House, Baltimore, Md. Architect, Louis Levi, Real Estate Trust Building, Philadelphia. Owners, Standard Brewing Co., Baltimore, Md. Brick and concrete, 1 story, 42x70 feet, slag roof, cement floors (heating and lighting reserved). Contract awarded to J. Henry Miller, Baltimore, Md.

Lunch Room (alts.), York Road Car Barn, Baltimore, Md. Architect, private plans. Owners, United Electric Railways, Continental Building, Baltimore. Consists of plastering, painting, plumbing, tile work, electric lighting, fireproofing, refrigerator. Contract awarded to C. E. Stubbs, Equitable Building, Baltimore.

Building (alts.), 20 West Franklin street, Baltimore, Md. Architect, Geo. R. Morris, Title Building, Baltimore. Owner, Geo. R. Morris, Title Building, Baltimore. New steam heating and electric lighting system, fire escapes, plastering, painting and plumbing. Owner is taking sub-bids.

Building (add.), 2931 West North avenue, Baltimore, Md. Architect, private plans. Owner, Annie L. Wiley, on premises. Brick, 2 stories, slag roof, electric lighting, plumbing. Contract awarded to Henry A. Knott, 2102 North Calvert street, Baltimore.

Hospital (alts.), Baltimore, Md., \$2,500. Architect, private plans. Owners, Marine Hospital, Baltimore, Md. Consists of alterations to surgical dressing room. Contract awarded to Henry S. Rippel, 1929 West Baltimore st., Baltimore.

Factory Buildings (2), Columbia avenue,

Baltimore. AArchitect, private plans. Owners, Bartlett-Hayward Co., Scott and McHenry streets, Baltimore. Frame, 1 story, composition roof, electric lighting. Contract awarded to Morrow Bros., Fidelity Building, Baltimore.

Garage, Cathedral near Center street, Baltimore, Md. Architect, J. Evans Sperry, Calvert Building, Baltimore. Owner, George H. Sargent, on premises. Brick, 1 story, slag roof, electric lighting, dampproofing, plumbing. Contract awarded to Thos. L. Jones & Son, 410 West Saratoga street, Baltimore.

Office Building (add.), Locust Point, Md. Architect, O. G. Simonson, Maryland Casualty Tower Building, Baltimore. Owners, Baltimore Dry Docks and Ship Building Co., on premises. Brick and steel and concrete, 3 stories, slag roof, steam heating, electric lighting, ornamental iron work, steel sash, metal doors, metal ceilings, ventilators, fireproofing and dampproofing, tile, marble, slate and composition floors. Contract awarded to West Const. Co., American Building, Baltimore.

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Permits for New Buildings

Garage, Pratt and Dufield streets, \$1,800. A. Forcaphugh (O and C), 1671 Dyre street. Brick, 1 story, 25x94 feet, slag roof, stone foundation.

Garage, Courtland and Tenth streets, \$3,500. M. Durkin (O), 927 Northeast Boulevard. Harry Hautman (C), 342 Porki street. Brick, 1 story, 17x88 feet, slag roof, cement floor.

Garage, Mantua and Fortieth streets, \$8,500. Wm. Burstein (O), 707 Filbert street. John P. Fallon (C), 449 South Sixtieth street. Brick, 1 story, 80x112 feet, slag roof, stone foundation, cement floor.

Oven, 315 Monroe street, \$500. Mrs. Annie Kratchman (O), 323 Monroe street. Abraham Kratchman (C), 315 Monroe street. Brick and cement, dampers and doors.

Garage, 2612 to 24 West Huntingdon street, \$10,000. F. M. Venzie (O), 2610 West Huntingdon street. Barclay White & Co. (C), 1713 Sansom street. Brick, plaster metal lath, 1 story, 120x38 feet, slag roof.

Car Barn, Penrose Ferry Road and Fort Mifflin Road, \$28,000. Philadelphia Railways Co. (O) Land Title Building. Wm. Steel & Sons Co. (C), 34 South Fifteenth street. Permit for foundation only. Horace Frank Real Estate Trust.

Dwellings (12), Gray's avenue and Seventy-first street, \$36,000. Calvin W. Rogers (O and C), 237 South Forty-ninth street. Brick, 2 stories, 14x28 feet, slag roof, hot air heating.

Dwellings (30), 4900-4960 North Ninth st., \$99,800. W. Fischers Sons (O and C), Ninth and Rockland streets. Brick, 2 stories, 15x48 feet, slag roof, hot water heating, stone foundation.

Tank and Tower, Forty-ninth and Botanic avenue, \$5,300. George W. Smith & Co. (O), Thirty-ninth and Powelton avenue. John N. Gill Co. (C), Otis Building. 50,000 gallon steel tank and tower.

Garage and Factory, Wayne avenue and Bristol, \$12,000. F. W. Maurer & Sons (O), on premises. Robert Beatty & Bro. (C), 2321 E. Fletcher street. Brick, 2 stories, 24x65 feet, slag roof.

Stack, Eleventh and Commerce streets, \$2,500. Frank & Sedor Co. (O), on premises. Warren Moore & Co. (O), Colonial Trust Building. Brick, 160 feet high.

Garage, 6145 Oxford street, \$1,800. J. T. Hickey (O), on premises. John S. Walter (O), Beechwood Park. Brick, 1 story, 22x22 feet, slate roof.

Factory, Thirtieth and Locust streets, \$100,000. Morris Wheeler & Co. (O), on premises. Wm. Steel & Son (C), 34 S. Fifteenth street. Brick, 1 story, 132x316 feet, slag roof.

Alterations and Additions

Store and Dwelling, 265 North Fifth street, \$1,000. Dave Frank (O), on premises. Jake Greenspun (C), 561 North Sixth street. Brick, 1 story, 10x8 feet, tin roof and alterations.

Dwelling, 6435 Overbrook avenue, \$1,000. Wilson & Chadwick (O), Overbrook, Pa. M. W. Young (C), Overbrook, Pa. Stone, second story addition, 8x9 feet, slag roof.

School, Fifty-seventh and Haverford sts., \$113,000. City of Philadelphia (O), Nineteenth above Chestnut street. Standard Const. Co. (C), 1713 Sansom street. Stone, 2 wings, 40x25 feet, 3 stories, slag roof.

Store and Dwelling, 816 South Ninth street, \$4,600. Gust DeMarco (O), 814 South Ninth

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street. Nicholas Seurei (C), 1218 Catharine street. Brick, third floor addition, 12x16 feet, and alterations.

Dwelling, 6719 Upland street, \$600. C. R. Boon (O and C), 2215 South Sixty-third street. Brick, 1 story, 14x20 feet, slag roof and shed rear, 14x10 feet, slag roof.

Dwelling, 4325 Paul street, \$400. Chas. G. Creutzburg (O), on premises. Ruoff Const. Co. (C). Porch addition, 14x5 feet, brick.

Dwelling, River Road and Port Royal ave., \$6,000. Mrs. Wharton Baker (O), Port Royal avenue, Roxborough. A. S. Aiman (C), 6927 Cresheim Road, Chestnut Hill. Stone, 2½ stories, 20x40 feet, exterior plastered, slate roof.

Dwelling, 1435 South Sixth street, \$550. Alex. Lerman (O), on premises. William Ariff (C), 352 Gladstone street. Brick, 1 story 13x11 feet, slag roof.

Factory, 219 Race street, \$925. L. Ketterer Co. (O), on premises. L. Douglass (C), 217 North Sixth street. Alterations.

Service House, 6302 Germantown avenue, \$300. Ladies Federated Club (O), on premises. I. A. Dunkelberger (C), 71 Herman street. Alterations.

Factory, 1822 East Venango street, \$1,250. David Watts (O), on premises. Fred A. Havens Co. (C), 845 North Nineteenth street. Brick, 1 story and basement, 40x20 feet, slag roof.

Factory, Seventeenth and Indiana avenue, \$700. Pooley Furniture Co. (O), on premises. Philip Di Giacomo (C), 2036 West Clearfield street. Alterations.

Store, Walnut Lane and Cresson street, \$350. Herman Green (O), 4280 Janney street. John J. Hurley (C), 4416 Cresson street. Alterations.

Dwelling, 514 North Seventh street, \$370. Land Title and Trust Co. (O), Broad and Chestnut streets. Robert Werner (C), 812 N. Twelfth street. Fire repairs.

Garage, 310 Richmond street, \$500. J. D. Hetzell (O), 322 Richmond street. James R. Eastwood (C), 1029 East Columbia avenue. Alterations and cement floor.

Store and Dwelling, Second and Segel sts., \$800. M. Mick (O), on premises. A. Barsky (C), 636 Pine street. Alterations.

Dwelling, 1624 Cherry street, \$540. Miss M. Hoffman (O), 1204 South Forty-sixth street. J. Y. Soux (C), 3731 York Road. Alterations.

Dwelling, 224 Shunk street, \$300. Harry Budman (O), on premises. Philip Goodman (C), 2540 South Third street. Alterations.

Garage, 6403 North Eleventh street, \$600. Helen Liehman (O), on premises. H. Hope (C), 5901 York Road. Brick, 1 story, 12x20 feet, slag roof.

Dwelling, 3014 Delancey street, \$500. Louis F. Benson (O), on premises. The Makin Heating Co. (C), 1827 Filbert street. Installation warm air heating system.

Dwelling, 331 South Forty-third street, \$500. Chas. L. Huff (O), on premises. The Makin Heating Co. (C), 1827 Filbert street. Installation warm air heating system.

Store, 2926½ Frankford avenue, \$820. M. P. Fox (O), on premises. Philip Weber (C), 1236 North Fourth street. Iron on iron, frame, 1 story, 32x34 feet, slag roof.

Dwelling, 6328 Vine street, \$1,800. Frank Di Berardino (O), on premises. Paul J. Hoff (C), 245 South Eighth street. Hot water heating.

Garage, 1508 Naudain street, \$2,000. Wm. Cresson (O), 520 South Eighteenth street. Chas. S. Zehley (C), Pine and Quince streets. Brick, 1 story, 16x66 feet, slag roof.

Garage, 2035 North Sixty-third street, \$1,850. Walter Smith (O), 2135 North Sixty-third street. A. G. Smith (C), 2135 North

Sixty-third street. Brick, 1 story, 50x24 feet, slag roof, hollow tile.

Store and Dwelling, Rush and Glenwood avenue, \$1,000. Mrs. J. Fessler (O), 1427 Rush street. Frank I. Wintz (C), 1618 North Twenty-seventh street. Interior alterations.

Boarding House, 12022 North Seventeenth street, \$2,500. Evangelical Lutheran Publishing Board (O), 1712 Arch street. David McClelland (C), 4011 Baring street. Brick front and alterations.

Machine Shop, 1620 Washington avenue, \$7,000. Dougherty & Baehran (O), North American Building. Conneen Const. Co. (C), 1737 Filbert street. Brick, 2 stories, 30x80 feet and 32x30 feet, slag roof.

Office Building, 224 South Third street, \$750. Westmoreland Coal Co. (O), on premises. J. Harvey Rea (C), 1019 Appletree street. Brick stack, 21x21 feet, 57 feet high, cement foundation.

Garage, 2032-36 South Sixteenth street, \$300. Wm. Stuard (O), 2030 South Sixteenth street. Chas. G. Seidel (C), 2524 South Juniper st. Fire repairs.

Dwelling, 1401 South Thirteenth street, \$300. D. J. Pappano (O and C), 1211 Wharton street. Brick, 3 stories, 15x5 feet, slag roof, rear addition.

Factory, 1529 Arch street, \$1,500. F. Ayer (O), 300 Chestnut street. Harry Rust (C), 724 Ludlow street. Alterations.

Bank, Seventh and Moyamensing avenue, \$1,500. Penn Bank (O), on premises. Frederick Shroetia (C), 703 South Tenth street. Rebuild vault and alterations.

Bank, 4344 Frankford avenue, \$1,100. Frankford Trust Co. (O), on premises. Sam D. Milner (C), 916 Crozier Building. Brick, second story addition, 11x18 feet, composition floor, slag roof.

Dwellings (7), 124 to 136 East Willard street, \$800. Robt. Cameron (O), 2811 Lexington avenue. Thos. Sheridan (C), 419 East Clearfield street. Fire repairs.

Boiler House, Cumberland and Oriana sts., \$500. Wm. Agnis & Son (O), Third and Cumberland streets. Chas. Feal (C), 1361 Ridge avenue. Ash tank support, steel.

Garage, 634 West Upsal street, \$900. Eugene McGuckin (O), on premises. Thos. M. Seeds (C), 1207 Rec street. Brick, 1 story, 25x5 feet, slate roof.

Store, 1911 Chestnut street, \$1,200. Joseph Habisroestler (O), on premises. C. F. Roeger (C), 51 North Hutchinson street. Brick, 1 story, 25x17 feet, slag roof.

Dwelling, 1504 North Fifty-ninth street, \$1,200. George Younge (O), 1427 North Alden street. Wm. J. Reiner (C), 1551 North Sixtieth street. Brick, 2 stories, 14x14 feet, slag roof.

Store and Dwelling, 4611 Frankford avenue, \$400. Louis Landsberg (O), on premises. B. Shostack & Co. (C), 528 Reed street. Alterations to flush bulk.

Garage, Tenth and Soreley avenue, \$5,000. Atlantic Refining Co. (O), 3144 Passunk avenue. Metzger & Fisher (C), Otis Building. Alterations.

Garage, 917 Filmore street, \$400. R. L. Shepard (O), Thos. Summerfield (C), 4773 York street. Brick, 1 story, 12x20 feet, slag roof.

Sand Pocket, Mascher and Duncannon avenue, \$1,000. Fairmont Foundry Co. (O and C), on premises. Frame building, 22x100 feet, with four compartments to hold sand.

Store and Offices, 405-07 Market st., \$900. Louis Strohn (O), 420 Market street. Basch Co. (C), 1426 South Front street. Alterations.

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., April 18, 1918.—Proposals will be opened in this office at 3 P. M., May 16, 1918, for the construction complete of twelve additional buildings and the remodeling of the attendant's quarters at the United States Quarantine Station, Craney Island, Cape Charles, Va. Drawings and specifications may be obtained from the custodian at the station, or at his office; in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

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THE HISTORY OF ARCHITECTURAL TERRA COTTA

ARTHUR B. PENDLETON, Secretary of the National Terra Cotta Society

Terra Cotta or burned-clay in a perfect state of preservation, has been removed from the ruins of great works where it had been structurally used more than one thousand years before the beginning of the Christian era. The history of civilization is written in its development. From crude brick forms, development to demand, through various structural and aesthetic requirement, we find it paralleling the building art of the ages. Meeting the requirement for permanence, form, color and beauty, terra cotta was freely used by Chaldean, Assyrian, Egyptian, Greek and Roman.

The architectural terra cotta produced in Italy in the sixteenth century show examples in construction and decoration both original and exquisite: a perfect medium for the rich form of the Renaissance of Italian architecture.

Spain, France and England developed the material to a limited extent, but its full recognition did not occur until the latter part of the nineteenth century, when the American architect co-operating with the progressive American manufacturer and builder appreciated it as the most durable and versatile of all building materials, and we find it now freely employed in the construction of all types of architecture, from the home of moderate cost to the great public building of monumental character.

The perfection of technique in body, form, modeling, texture and color to which the modern material has been developed, warrants us in assuming that we have reached a state of perfection in its history and the true Renaissance of terra cotta.

Differing essentially from all other clay products, requiring greater strength of body and more accuracy in finished ware, the clays of appropriate composition are limited and carefully selected. Clays of different properties are mixed for both ceramic and mechanical reasons, a burned grit or grog is added to regulate shrinkage and form key to body and the mixture wet-panned and pugged to proper consistency for presser.

This body or mixture must be so composed that it will be tough enough to stand the handling in the "green" or unburned state, to bear the strain of shrinkage of one-twelfth its bulk from "green" to burned ware during process of drying, cooling, burning to about 2,150 degrees

Fahrenheit and again cooling to normal and withal, as finished product to withstand the crushing strain required in modern construction.

The architects' drawings are detailed by the manufacturer to shrinkage scale and to "terra cotta construction." The latter based on intimate knowledge of material characteristics and showing all anchoring and jointing, are submitted to the architect for approval.

In plain work, shop drawings go directly to plaster shop, where models of plaster are made and moulds of plaster taken therefrom in sufficient number to accommodate quantity of material to be pressed; a mould standing the wear of from twenty to fifty duplications according to size.

When modeling is required, the plaster model is taken to the studios where skilled modelers and sculptors apply the ornament which is then photographed and sent to architect for approval. After receiving his approval or correction the piece is sent to plaster shop for the making of the mould.

In the pressing shop, these moulds are faced with from $1\frac{1}{4}$ to 2 inches of clay in which are built up partitions of about one inch in thickness, leaving spaces or cells of about six inches—placed with regard to the size and structural necessity of the unit. When sufficiently stiff, the piece is turned out on drying board, where it is finished, i. e., mould seams removed and surface and texture formed. In ornamental pieces each part of ornament must be carefully retouched and pointed to the feeling and crispness of original model.

From the drying rooms or tunnels where the material must be slowly dried and all moisture evaporated, it passes before the sprayers where the surface finish, glaze, enamel or color is applied by atomizer, using compressed air. Of carefully guarded formulae, these sprays, surfaces and enamels of various colors and tones are originated and prepared by highly trained ceramic chemists to a perfect sympathy of shrinkage with the body of the terra cotta.

The terra cotta ready for burning is carried to the "muffled" kilns in which it is loaded in tiers built of fire brick posts and slabs, thus relieving it of any weight. The flames carried through muffles and double walls do not come in direct contact with the charge, which is carefully protected from gas and flash. It is literally baked to a heat of about 2,150 de-

grees Fahrenheit, white hot and translucent, the heat graded and controlled.

Slowly cooled to normal, the terra cotta is removed to fitting floors, assembled, fitted to dimensions and joint allowance, checked and marked to correspond with setting drawings.

Architectural terra cotta requires approximately sixty days' time in process of manufacture.

Architectural terra cotta is one of the most durable building materials known. It is unaffected by age or climatic change. Its glazed and enamel surfaces render it practically impervious to moisture; dust and dirt may be removed at trifling expense with dry brushes or plain water. Having been carried during process of manufacture to a heat exceeding 2,000 degrees Fahrenheit, it is fire-resisting. Government requirement for interior partitions is but 1,700 degrees Fahrenheit fire test. Salvage in the Baltimore, Buffalo and San Francisco fires was not only very high and much greater than in any other exterior building material, but such damage as occurred, was from mechanical cause and not from heat.

Architectural terra cotta is economical in structural weight. Its plasticity during manufacture makes it economically adjustable to any form of structure: concrete, steel or brick, and very simply anchored and tied thereto. This has become most apparent in the re-enforced concrete structures of to-day. Shelves, brackets and beams are readily poured and the required anchors, rods and ties for the engagement of the terra cotta unit may be set or laid before the pouring. The light weight of terra cotta secures a minimum of structural support and consequent cost saving in steel frame and anchorage of the building. Owing to perfect union in wall bonding, many city building ordinances allow terra cotta wall facing to be considered as part of the thickness of the wall.

In architectural terra cotta we have a peculiarly versatile and broad medium of aesthetic expression. In no other material does the architect find the manufacturer or artisan so alive to color mass and salient line; to scale of block and unit; to color scale, relation and harmony and above all to appreciation, feeling and sympathetic understanding and execution of modeling, so important an element in the individuality of any architectural composition.

(To be Continued Next Week)

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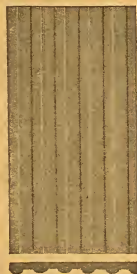
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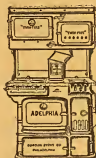
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May 8, 1918

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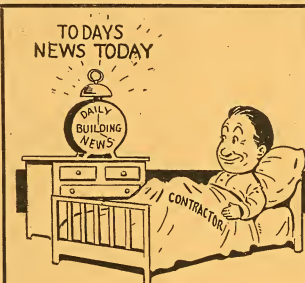
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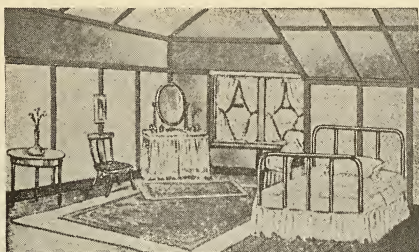
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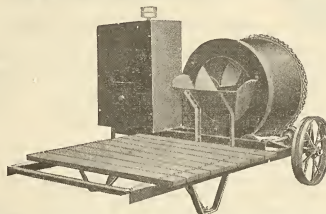
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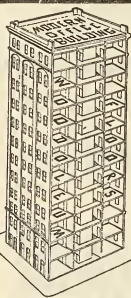
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As The Editor Sees It



IN simple language and in words of one syllable, so that he who runs may read, or those that sit still may comprehend—a match will float, a tack will sink, hence the primitive wooden ship, thence the marvel of the iron ship—now the incomprehensible stone ship!

"The Faith"—a concrete ship—releases the wood and steel industries to more urgent uses, it is an omen and a token of world democracy greater than the submarine has been a menace—it is the Monitor vs. the Merrimac; it is history repeating itself—it is bad news for the Kaiser.

Thus Willis Polk in the *Architect and Engineer* of California expresses the hope of all Americans to-day, for if the "Faith" justifies her name, a step will be taken in world progress, which will indeed spell revolution in every form of construction.

By June 1 the Faith is to be ready for her maiden voyage. She will go to Honolulu and return with a cargo of copra; and on this voyage hangs the fate of concrete in ship construction, for as President Comyn has said, "If she can withstand the beatings of the waves, the world will have to recognize that concrete vessels are a success and entitled to place in the front ranks of ships."

Other boats of concrete have been built, but never one so large as the "Faith." The first concrete boat was made in France by M. Lambot. This little boat was nine feet long, and after Lambot had exhibited it at the World's

Fair in Paris in 1855 and patented his process, it was forgotten. Recently a 400-ton ship was built at Moss, Norway, and is now in service between Norway and England, and many concrete barges are now used in France to transport war munitions and supplies.

The "Faith," however, is in an entirely different class, having a capacity of 5,000 tons. She is 336 feet long, 44½ feet of beam, 30 feet deep and 5,000 tons dead weight. Empty, she draws nine feet of water. Loaded to capacity, she will draw twenty-four feet of water. Her designers have made no provision for carrying ballast in her structure, as they believe that she is so heavy that no ballast will be necessary.

A great advantage of the concrete ship is that where it costs \$500,000 for a steel ship building yard, the Faith was built in a yard costing \$15,000.

If the Faith stands the test to which she is to be subjected, another triumph for concrete will be added to her already large list, which contains now houses, garages, roads, bridges, tunnels, conduits, subways, floors, roofs—in fact, almost everything is now done "concretely."

* * *

ONE of the best concretes is Portland cement concrete, as Portland cement was one of the first to be standardized. Its success as a building material is assured by several reasons. First, practically

every State in the Union possesses cement making materials sufficient to warrant the establishment of cement mills, so that with such quantities of raw materials at hand it would be difficult for a shortage to occur. Then, where transportation is delayed, Portland cement concrete eliminates this difficulty by making use of materials found on the site of the work, and the Portland cement alone need be brought in.

The growth of the Portland cement industry is most interesting. The manufacture of American Portland cement first secured recognition at the Centennial Exposition in Philadelphia, when David S. Saylor exhibited Portland cement made at Coplay, Pa.

Portland cement had its origin, however, in Leeds, England, in 1811. Joseph Aspdin, a mason, discovered that burning certain limestone and clay gave a product which, when pulverized, made a superior cement. The color of this product resembled the colithic limestone of the Jurassic Age, occurring on Portland Isle, Dorsetshire, England. So the inventor called it Portland cement.

Probably the earliest use of the material on an important project was in the Thames tunnel about 1830. Shortly after this the sons of Joseph Aspdin built works for the manufacture of Portland cement and began with an output of 3,000 casks a week. At the present time some American companies manufacture about 350,000 barrels a week. In 1880 America produced 42,000 barrels

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of Portland cement and in 1916, 92,000-000 barrels.

The imports during this period of time show remarkable fluctuations. In 1878 America imported 92,000 barrels of the cement; in 1891 the amount increased to nearly three million; since that time the industry has made such strides in our own country that practically none is imported and now nearly 3,000,000 are exported yearly.

The first recognized use of concrete was for foundations and walks, but its use for floors, partitions and similar work is of a much later date.

An example of the worth of concrete in this respect is given in the *Record and Guide* of New York. "When the site of the new Union Station in Chicago was being cleared the Western Newspaper Union Building had to be wrecked, and as it was an eight-story reinforced concrete building of standard design it furnished an excellent opportunity for experiment. It was decided to load one of the floors to the breaking point largely to determine whether the theoretical calculations would be verified in practice. The building had been erected some eight years previously, and seemed capable of standing a hundred or more.

Four panels about 17x19 feet were loaded with pig iron, and the results on the floor carefully measured by delicate instruments. Although the floor was calculated for 175 pounds per square foot, 910 pounds were loaded on every foot of the four panels. This meant a pile of iron nearly six feet high over the entire floor space tested. Even at this load the floor did not fail, but there was indications that stress approached the point of ultimate strength. The test was an excellent one to verify the correctness of engineering formulas used in reinforced concrete, and was one of the most elaborate tests to destruction to be made on a commercial building in use for such a length of time. It proved that the figures used in designing were well within the limit of safety.

Fifty years ago, then, Portland Cement was in its experimental stage and today it surrounds us whether we live in town or country. If any one doubts the universal use of cement and concrete, he needs only to glance through the articles on this subject which appear in this issue of the *GUIDE*.

* * *

PREPAREDNESS is one of the new American Watchwords; planning for the future is being urged upon us from all sides. *The Ohio Architect, Engineer and Builder* sees further than most of us have dared to in airplanes and architecture.

Architects are aware of the controlling influence already exerted upon residence architecture by the automobile, says the

Building Review. Those who are applying themselves to a study of city planning problems are forcibly reminded of the absolute dominance of traffic already assumed by the automobile. The necessity of providing parking spaces in the vicinity of public buildings, theatres, hotels, auditoriums, parks, and in the business districts, is making itself felt in all important new work.

The automobile's rapidly growing power of changing preconceived notions could be enlarged upon here considerably, but the present intention is to mention as a reminder another factor now looming up definitely as a further controlling influence of the modern city, and of the building of the future. This factor which is to be reckoned with is the airplane.

Six years ago Waldeman Kaempffert discussed the relation of "the flying ma-

chine and the roof." At that time the airplane's development had not anywhere approximated its latest achievements, and what was true then of Mr. Kaempffert's discussion of the modifying influence that the airplane of the future would exert upon architecture and the plan of cities, is true today with increasing force. The time is approaching, gradually, and not with any degree of haste, it is true, but nevertheless surely, when the question of providing for the flying start, landing and housing of thousands, of every-day airplanes will not be an abstraction but a crude reality.

Architects who are interested in the possibilities here suggested cannot too soon begin a study of the problem that will confront planners and designers both, for it has definitely a practical and aesthetic side of which thus far there has been no general attempt at a solution.

THE HISTORY OF ARCHITECTURAL TERRA COTTA

ARTHUR B. PENDLETON, Secretary of the National Terra Cotta Society

(Continued from Last Week)

In many instances architects furnish accurately figured scale drawings only; perhaps further illustrated by rough sketch, or reference to style, period or example; relying upon the manufacturer and his staff, trained in architecture, color, modeling and sculpture, for intelligent assistance in the development of his details for architectural terra cotta.

Another important advantage of terra cotta lies in the fact that ornament and modeling may be used freely, as with model once made the material presses at practically no increase in cost over plain work.

Development in the department of the ceramic chemist of the manufacturer, has given so broad a range, that almost any color or tone may be had; from the dead white, suggestive of Italian marble through the cream and buff shades into the greys; some closely assimilating the soft warm greys of the French Caen stone and others the subtle charm of the marbles of Travertine. In texture and surface treatment there is no limit; from the natural clay finish made impervious with a slip, through the range of matter or dull, to lustrous and brilliant enamels is the range; and from the smooth or honed finish, through different degrees of tooling, dragging and stippling to any degree of roughness that is to be desired.

The field for the use of color or polychrome in terra cotta, for exterior and interior, is very broad, and the palette most extensive in tone and texture. The enamel applied to the unburned body becomes

not only a part of and inseparable from it, but is absolutely permanent in tone.

A review of the preceding paragraph on the process of manufacture of architectural terra cotta reveals the source of its economy—its plasticity and the facility with which it may be reproduced. A mould once made may be accurately duplicated many times. Care and thoughtfulness in the design of unit and feature, with regard to reproduction, yields great reductions in cost.

Combined with all the foregoing a very important advantage the use of architectural terra cotta has is found in the facility for delivery, which is important, as all the architectural terra cotta plants are situated in or close by the larger cities with, in many cases, a choice of rail, water and motor truck delivery. Their source of raw material (clay) is on or near their property, which eliminates the uncertainties attached to the transportation of raw materials great distances prior to manufacture.—"Record and Guide."

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A STANDARD HOUSE BUILT OF CONCRETE

Milton Dana Morrill

Not many years ago shoes, clothing and other wearing apparel were all made up separately, piece by piece. Little by little it was found that these articles could be standardized and made up at wholesale. The result is that these standard articles are much less expensive than articles of the same quality when made to order.

Recognizing that the same principle would hold true in home building the research department of one of the great Portland Cement Companies authorized the writer to work out a standard plan for a moderate sized suburban house.

The aim in the design has been to give the most compact and convenient house and one that would be moderate in first cost as well as low in the yearly upkeep and repair expense.

The house is nearly square in plan. This shape requires the least exterior wall to enclose a given space. The front porch is of the built-in type and serves as an open air living room in summer. In winter this space can be enclosed with glass, when it becomes a sun-room and serves as a vestibule.

An ample closet for wraps is found just beside the front door. The living room presents a spacious appearance as it is 21 feet in length and opens with the dining room. The ceiling is finished with the beams exposed. The stairway leads directly from the living room with only a portiere across the entrance. This need be drawn only in the coldest days when much of the heat would otherwise escape up the open stairway.

The kitchen is light and airy with windows on both sides and has a good sized pantry adjoining. Space for set tubs adjoins the kitchen sink. The cellar entrance is direct from the outside so that the usual cellar doorway is made unnecessary.

In the second story there are four bedrooms and a bathroom. Hanging clothes racks are in the bedrooms as these take up less space than the usual closets.

There are six exterior designs, all of which can be used with the same standard plan and interior arrangement. This gives a choice as to the exterior appearance. An entire block might be built up with these standard houses but on account of the different exteriors and possible changes in color of the cement stucco no two of the houses would be exactly alike.

The building of these reinforced concrete houses can be made to a large extent a machine process. Steel moulds are used to form the walls and mixers are used to prepare the concrete. Most of the work can be done by unskilled workmen. One advantage of this construction is the fact that in most every location the materials to make concrete can be found near by. Clean coal cinders, which are a waste product in most places, can be used to mix with the sand and cement if gravel or crushed stone is not at hand. Cinder concrete is naturally less in strength, but when

properly made and reinforced it has proven amply strong for house construction.

The reinforced concrete house has sometimes been confused with the stucco house, which is of wooden framework plastered over with cement mortar. The reinforced concrete house has the walls moulded in place and is reinforced by steel bars, which are embedded in the concrete. Thus these walls have the combined strength of the concrete and the reinforcing steel.

Concrete in itself is not a new building material. The Romans built the great Colosseum of concrete. Much of the stone facing has been destroyed but the concrete part stands today just as good as it was one thousand years ago. This Roman concrete was mixed just as we do it today. Small stones, sand and cement were mixed with water until it resembled mud. It was then placed or poured into the forms to make the walls. Today we have the advantage of the steel reinforcement as well as steel forms in which to do the work.

In house building we can make only the exterior walls of concrete, leaving the interior to be of the usual wood frame construction, or the floor slabs may be of reinforced concrete also. These can be finished with a hardwood surface. We can, if desired, go a step further, and make the whole structure of reinforced cement concrete, giving the floors a polished cement finish. This makes a house that is entirely fireproof and is perfection from a sanitary standpoint. The interior of such a house is much like that of a china dish. It can be washed out from top to bottom. All of the corners can be made curved and all of the usual woodwork at the windows and doors can be omitted.

An interior of this sort will be very simple and plain, but if the walls are given a stipple finish and rugs are used as floor covering such an interior can be made very attractive.

The reinforced concrete walls make not only a very substantial and warm house in winter but present a very attractive appearance with the cement stucco finish which is generally used. This stucco finish can be made of white or gray cement and tinted if desired. It can also be left with a smooth or a rough texture, whichever is preferred. Vines and flower boxes show to advantage against these stucco walls when used to decorate them.

Estimates on the construction of these concrete houses range from \$3,200 to \$4,000, according to location and the cost of materials. This figure is based on a complete, well-finished house.

Concrete has already become the standard construction for pavements and streets as well as for factories and warehouses. It has taken the place of stonework for bridges and on engineering works. It will become also a standard construction for house building as soon as the building public realize what a wonderful material they have in reinforced concrete for home building.—Keith's Magazine,

HOW CONCRETE CAN BE MADE WATER-PROOF.

Many methods and ingredients have been devised for making concrete completely waterproof. In many kinds of stucco work and in concrete that need not be impervious to ordinary dampness some of these are applied to walls after they are finished. In others the waterproofing is made a part of the concrete mixture, this latter being known among masons as the integral process. About two per cent. of the materials used in integral waterproofing is customarily added.

The purpose of the integral addition is to supply a filler even finer than the cement which shall close the most minute parts left between the sand grains and the cement. Alum and lime are sometimes used, as are diluted soap and emulsions of oil. Soap in the water, with which cement is mixed, and alum in the concrete mixture, are supposed to act chemically upon each other and produce a totally non-porous substance. There are many integral compounds, manufactured under trade names, most of which are relied upon by masons for ordinary work.

But for cisterns, retaining walls that must withstand long and steady soaking, and floors subjected to frequent floodings no process has been found as efficacious as the application of waterproofing on the side that is subjected to the water. Of these the most satisfactory and the cheapest, where the character of the work permits of its use, is asphaltum, either as a dissolved pain or heated and applied while liquid. This may be applied with a brush, allowed to soak in, and repeated coats added till the workman is sure every pore is closed.

Another process depends upon paraffin to close all pores against moisture. The application of paraffin is a more complicated and expensive process and is not considered more effective than the asphaltum coating. It has the advantage, however, that it may be applied to stucco or other exposed surfaces without marring their appearance, and paraffin-finished walls may be painted any color desired with specially prepared paints.

In applying paraffin the surface to be covered is gone over with a gasoline torch and heated, a small area at a time, and the paraffin at high temperature blown on in a spray. The heated wall draws the liquid paraffin into every pore, and when the work is finished the surface is covered with a film of wax. Paraffin is sometimes dissolved in benzine or some other solvent and applied like paint. When this method is used several coats must be applied, each being allowed ample time to dry out.

The chemical affinity of soap and alum is the basis for another waterproofing method. Soap, preferably an olive oil or castile soap, is dissolved in hot water at the rate of four pounds to five gallons. Ten ounces of alum is dissolved in five gallons of water in another vessel. First the soapy water, at a temperature as near boiling as can be maintained, is pushed over the wall, and it should be

brushed in till a smooth, unbroken surface is secured. After the soap has thoroughly dried, in from one to two days, a coating of the alum water is applied and allowed to dry. Another coat of soap and a second coat of alum finishes the job. In a short time it will be found that chemical action has amalgamated the soap and alum into a coating that thoroughly withstands water.

It will readily be seen that these processes are expensive, even the asphaltum costing from forty to fifty cents a square yard. Hence, the builder will do well to see that his concrete is made rich enough with cement and is sufficiently firm, so that his wall will require no further waterproofing.

Many workers in cement, particularly plasterers putting up stucco or applying finishing coats to concrete walls, use lime in their plaster. An addition of lime makes the mortar more smooth and putty-like and much easier to handle, straight cement mortar being short and inclined to be crumbling. The best authorities agree that a small admixture of well-seasoned hydrated lime does not harm cement mortar if it is thoroughly incorporated. But the danger in ordinary practice is that the lime will be allowed to run through the mortar in lumps. A lump of lime, even though it be no larger than a pinhead, will absorb water, while the surrounding cement remains dry.—"The Architect and Engineer."

SURGICAL DRESSINGS FROM TRACING CLOTH

American manufacturers, architects, and all draftsmen are called upon to render an important service to their country. When the workman has finished with the piece of cotton or linen cloth used in his trade, it is flung aside to be destroyed. The Red Cross is asking now for that discarded material. All over the country thousands of women are earnestly engaged in the manufacture of surgical dressings to be used in the hospitals for our wounded soldiers and sailors. The problem of getting enough white goods for this work is enormous. As long as the war goes on the work must go on if we are to live up to the humanitarian ideals typified to the world today by the Red Cross.

Two kinds of cloth are available—draftsman's tracing cloth and old linen and cotton articles to be donated from private households and, often in large quantities, from hotels. These can be easily collected and handled by the modern laundries, which have now been called upon to perform this work for the Red Cross. With their facilities for collecting, washing, sterilizing and delivering to the local chapters, the laundries are in a position to perform an invaluable service and the least that other trades can do is to help them in every way. If any manufacturer, architect, or draftsman will go to the slight trouble of calling up either the local Laundryowners' Association or one of the large laundries of his city, he will find them only too glad to send for such cloth as he can give them.

CONCRETE ROADS

I sit me down to write an ode about the great ideal road. In these uplifting, modern days we've found the punk thing never pays. The coin we've wasted making roads which wouldn't stand beneath our loads! That coin would buy us battleships till all the navies we'd eclipse. That silver coin, if stacked on end, would reach the good old moon, my friend.

We made our dizzy thoroughfares, and then were busy with repairs; the more we fixed the dadblamed things, the more they needed help, by jings. But now there's no excuse for such, for wasting wealth to beat the Dutch. The concrete road has shown its worth; it is the greatest thing on earth. It solves a hundred problems that once jarred the thought works in your hat.

Its cost is low—and that's worth while, since saving money is the style; and when it's built it's built to stay—it will not blow or wash away. It's pleasant, sure, to have a pike on which to travel when you like, nor find it wound around a hedge, nor buckled up, nor stood on edge. The concrete road is always there, and seldom clamors for repair, and all the scientists agree as to its durability.

Its surface smooth, you haul a load you couldn't on another road, and every parasing you go, you're saving time, and likewise dough.

Good roads! You hear that slogan sound wherever you may jaunt around. Go east or west, or north or south, you'll hear that cry from every mouth. For now the people have grown wise, and thoroughly they realize for better roads we all must yell, if we'd reduce the H. C. L. It needs no diagrams to show that better roads makes prices low; consumers save a yen or more, on things delivered at their door.

Since for good roads we make behest, and since the concrete roads are best, the argument is at an end; we must have concrete road, my friend.—Walt Mason, "The Architect and Engineer."

PREPARING FOR WAR OF PEACE

The European war to which we are now committed is as much our own war as it is the life-and-death grapple of England and France with the enemy that sought their destruction. Our national security is as much at stake as if the invader had already crossed our shores. The underlying motive of the war was Germany's overmastering business ambition; the economic weapon will determine the result; it will likewise shape the aftermath. While we are fighting for world freedom of thought and action we must likewise arm ourselves for the coming war for economic independence.

Short-sighted economy today is merely giving aid to the trade enemy of the future. It is all right to save for victory, but it is equally necessary to spend for victory. Our triumph on the actual battlefields of war must be bulwarked on the business battlefields of

peace. Every dollar put into new machinery, every fresh enterprise launched now constitutes just so much antidote against the inevitable German economic aggressions of peace, when Germany will concentrate all her genius of efficiency and organization upon the supreme effort to come back commercially.

It is no time for business slacking in the United States.

Our allies are alive to this danger. They are taking out insurance amid the distractions of colossal tumult. England is writing a policy in the shape of an expanded and speeded-up industry, of an industrially educated youth, in the work of a reorganized board of trade that has become an imperial school of salesmanship. France is being industrially reborn through war; Italy is converting reverse into a rebirth of nationalization which will be a powerful factor for advancement when peace comes. We may well heed these examples.

Meanwhile the German propaganda thrives in our midst. Whether with plot or poison it is dedicated to one purpose—the salvation of Teutonic trade.—Isaac F. Marcossin in "Saturday Evening Post."

IF—

By F. N. Farrar.

Secretary Builders' Association Exchange of Buffalo.

(With apologies to Kipling.)

If you can find a man who, when he is ready
To build a factory, store or big hotel;
Whose architect is smart but not too heady,
Whose cranium has lost its erstwhile swell;
If you have sufficient time in which to figure
And get your sub-bids in the proper shape,
E'en though the job's a shak or something bigger

And you're not too much encumbered with
red tape;

If you can keep your cost from climbing out
of reason
And trust yourself to take the job off
right,

If you can discount the delays of any season
And can trust your men a minute out of
sight,

If you know that you can boss your operation

And, on how to run the job, your mind is
clear,

Nor harassed by union domination,
Nor let the business agents interfere;

If you're sure that you have covered compensation

And your overhead's included in the sum,
If you've written in a prayer for your salvation

From the troubles which you know are sure
to come,

If you've allowed yourself a fair amount of
"honey,"

Just enough to cover shrinkage when you're
done;

IF you're low and IF—the owner has the
money,

Perhaps you'll make a cent or two, my son.

WOMEN AS ARCHITECTS.

The great war has opened up new means of employment for the women of the future. The latest is architecture, and on October 1st the Architectural Association, of which the King is patron, opened its school for the first time to women students. The Association, constituted in 1847, is the recognized educational body for the study of architecture in its varying branches, and the opening of its doors in new offices recently acquired at 34 and 35 Bedford street, London, W. C., should prove a matter of great interest to women as well as members of the architectural profession. The examinations of the Royal Institute of British Architects have been open to women and also the new degrees in architecture at the different universities, but the fullest educational facilities have not been available until now. It is not improbable, says the "Times," that the scarcity of male students—there are only about twenty, compared with the usual 120—may have influenced the council's decision, though it is not given as the reason. The head master (Mr. Robert Atkinson, F. R. I. B. A.) stated recently that women would find a field for their abilities more particularly in decorative and domestic architecture rather than in planning buildings ten and twelve stories high. It was necessary for those who planned domestic architecture to know something of the social life of the prospective occupants of the buildings, and in this women would have certain advantages over the male architect. The school has special arrangements made for the accommodation of women students. The plans were made by the head master, and include a fine library, where the valuable collection of books will be housed, and three large studios. It is interesting to note that a cinema is part of the school equipment, being specially useful for demonstrating the points to be looked for when visits are paid to workplaces of different kinds.—"Architect and Builder," Cape Town.

The Capital Issues Committee announces in its bulletin of April 8th that it has a plan for working in conjunction with The United States Employment Reserve to the end of avoiding the creation of idle labor.

This action is of great interest to the building industry, since the problem of how the building industry could serve the country and at the same time remain idle, has not yet been solved.

At the time of Mr. Bernard M. Bauch's appointment as chairman of the War Industries Board, President Wilson emphasized "the studious conservation of national resources and facilities." As has been shown in the cases of France and England, building may be deferred but it cannot be eliminated; it is, indeed, a national facility.

On March 15th Secretary McAdoo, in a letter to Mr. Samuel Gompers, wrote: "I have been reported in the public press as having 'appealed to property owners not to construct any homes or buildings during the war.'"

This is entirely erroneous. I have said that building operations which are not required to protect the health or provide for the comfortable needs of our people, or to supply facilities necessary for the proper conduct of business essential to the successful prosecution of the war, should be postponed."

It has been found that building labor and materials are lying idle in all but those localities on the Atlantic seaboard and in the South, where governmental work is progressing on a large scale. Thus, the building industry, with labor and materials at hand, is not seeking war priorities.

Useful building must proceed; every man, every dollar and every ton of material should be utilized, so that at this time when conservation is imperative there should be no waste. The Capital Issues Committee in its bulletin of April 8th hopes "that its operation should not create idleness any faster than the demand for labor can counteract."

Thus, says "The Record and Guide of New York:" "It is clear that every man in the building industry ought to feel that it is incumbent upon him to use his best efforts to prevent such waste and to keep labor employed, always having in mind that the results sought shall not be luxury, ornamentation or any unnecessary building, but only that which adds to the needed comfort and efficiency of the community and to the productive wealth of the nation."

ONE WAY OF SECURING CONTRACTS.

A. Wiseman, an electrical contractor in California, was a hustler, and his work was a combination of good quality and reasonable prices. He had hundreds of competitors—or did when he decided to "label his work," but since then most of them have faded away (some of them, he writes, are now working for him), and what's the reason?

Well, he figured it out thus: Every contract he secures he puts a sign on to show the public that he is on the job; that it was only another structure he was wiring. One sign, plus good work and reasonable prices, enabled him to land another, and to-day it is a foregone conclusion that if anyone is going to have electrical work done A. Wiseman will have a chance at it.

Now take this home to yourself—be A. Wiseman in your community. No matter whether you supply the brick, the lumber, the mantels, the glass, the millwork, the roof or the waterproofing of the cellar—no matter whether you are the architect, the contractor, the stairbuilder or plumber, tell the passerby that you are "on the job"—that is, if you are proud enough of your work—willing that it or the material you are selling should bear inspection. There is nothing more dignified or elegant than these 2x3 feet signs manufactured by the Independent Printing Companies of U. S. at Washington, D. C., and which sell for about 15c. each. They are well made of flexible hemp fibre, better than cardboard, cloth or metal—not greasy, but absolutely weatherproof. A sample is obtainable upon request.

Independent Printing Companies of U. S.,
McLachlen Bank Building, Washington, D. C.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently," but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectively than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in **your** case, we are not in a position to say.

Why not try it out?

The cost is not excessive.

Call Mr. L. S. DeLone.

THE BUILDERS' GUIDE

Pennsylvania's Oldest Architectural and Building Trades Magazine

In Continuous Publication 30 Years

Perry Building, Philadelphia.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Dwellings (56), Peach street, Warrington and Florence avenue, West Philadelphia, \$135,600. Architect, private plans. Owners, Ferguson & McDowell, 1003 South Fifty-first street, Philadelphia. Brick, 2 stories, 16x34 feet, slag roof, stone foundations, hot air heating, combination lighting, pine floors. Owner ready for sub-bids.

Factory (alts. and add.), 5119 Stiles street, Philadelphia. Architect, E. Gibson, 220 West Forty-second street, New York City. Owners, Dentists' Supply Co., 220 West Forty-second street, New York City. Consists of remodeling of present building, 3 and 2 stories, 98x37 feet, addition, brick, 3 stories, 49x21 feet, and 1 story, 11x13 feet, slag roof, stone and concrete foundations, yellow pine and reinforced concrete floors, steam heating (lighting reserved), hollow tile, millwork, hollow metal skylights. Architect has received bids.

Store Building (alts.), 908 Walnut street, Philadelphia, \$4,500. Architect, LeRoy B. Rothschild, Bulletin Building, Philadelphia. Owner, J. Lipschutz, care of architect. Consists of flush bulks, steam heating, plumbing, tile work, rolled steel skylights, hardwood floors, glazing. Plans in progress. Architect will take bids in a few days.

Factory, Seventh and Wood streets, Philadelphia. Architect, H. M. Hokanson, 1713 Sanson street, Philadelphia. Owner, Charles W. Lawser, 623 Wood street, Philadelphia. Brick and tile, 2 stories and basement, 90x51 feet, slag roof, cement floors, rolled steel and hollow metal sash and skylights, fire doors, roof ventilators. Owner taking approximate bids, due as soon as possible. Barclay White & Co., 1713 Sanson street, is figuring.

Garage (add.), North Philadelphia. Architect, private plans. Owner's name withheld. Brick, slow burning construction, 1 story, 100x100 feet, slag roof, cement floors (heating, lighting, plumbing reserved). Thos. C. Traylor, 1613 Sanson street, is taking sub-bids.

Workmen's Houses (500), A and B. C. and D, Elmwood avenue, Gibson avenue, Sixty-first street and Sixty-second street, West Philadelphia. Architect, private plans. Owners, Emergency Fleet Corp., 136 South Sixteenth street, Philadelphia. Brick, 2 stories and basement, 16x30 feet, slag roof, cement and pine floors, hot air and steam heating, electric lighting, dampproofing, ornamental iron work. Owners have received bids.

Factory (add.), 713-15 Cherry street, Philadelphia. Architect, John V. Speth, 1615 Sanson street, Philadelphia. Owner, J. F. Burns, on premises. Brick, mill work, 5 stories and basement, 30x52, slag roof, pine floors, hollow metal skylights, fire doors, ornamental iron work. Owner taking bids, due May 11th. Philip Halbach Cont. Co., Twenty-sixth and Thompson streets; R. C. Ballinger & Co., 218 North Thirteenth street, are figuring.

Fire Tower and (alts.), Seventh and Penn streets, Philadelphia. Architect, George M. Ewing, 34 South Seventeenth street, Philadel-

phia. Owners, Wilby Building, on premises. Brick and mill work, 3 stories, slag roof, steam heating, electric lighting, cement and pine floors, metal lath, fire doors, ornamental iron work. Architect has received bids.

Store and Office Building, Fifty-second and Walnut streets, Philadelphia. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, Daniel L. Evans, Lafayette Building, Philadelphia. Brick, 2 stories, 40x50 feet, slag roof, stone foundations, steam heating, electric lighting, tile work, metal ceilings (store fixtures, see architects). Architects taking bids, due May 9th. Driscoll Co., Stock Exchange Building; E. E. Hollenback, Inc., 1804 Brandywine street; Chas. McCaul Co., 1713 Sanson street; Monaghan & Losse, Inc., 3016 Chestnut street; and Rush Bros., 1100 Filmore street, are figuring.

Mill Buildings (alts. and add.), Twenty-fifth and Spruce streets, Philadelphia. Architects, Day & Zimmerman, 618 Chestnut street, Philadelphia. Owners, Cleveland Worsted Mills, Allegheny and Emerald streets. Consists of new office building, brick, 1 story, 24x30 feet, slag roof, 2 fire towers, brick, rearranging toilet rooms, plumbing, 1 freight elevator. Plans in progress. Architects will be ready for bids in three weeks.

Office and Undertaking Building (alts. and add.), 1927-29 North Broad street. Architects, Price & McManahan, Bellevue Court Building, Philadelphia. Owner, Schuyler Armstrong, on premises. Reinforced concrete, brick and stucco, 3 stories, 40x80 feet, slag and tin roof, stone foundations, steam heating, electric lighting, tile and marble work, rolled steel sash, fire and kalamein doors, iron stairs, ornamental iron work, canvas and slate roof, cement and parquetry floors, metal lath, wire work. Architects are taking reserved bids from Pringle Borthwick, 8018 Germantown avenue, and Pomeroy Const. Co., 1609 Ranstead street.

Nurses' Quarters (add.), No. 2946, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story and 5 stories, 20x80 feet, 20x20 feet and 20x155 feet, 23x56 feet and 18x20 feet, ready roof, cement floors, steam heat, electric light, waterproofing. Owners have received bids.

Service Building (alts.), southwest corner of Twenty-third and Chestnut streets. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, E. A. Poth Estate. Thirty-first and Jefferson streets, Philadelphia. Lessees, International Motor Co., on premises. Consists of general interior alterations, mezzanine floor, cement floors. Plans completed. Architect will be ready for bids in a few days.

Store Buildings (2) (alts. and add.), east side of Fifth above Race street, Philadelphia, \$15,000. Architect, private plans. Owner's name withheld. Brick, 2 stories, 90x60 feet, steam heating, electric lighting, yellow pine

floors, plumbing. Lam Building Co., 1001 Wood street, is figuring.

Temporary Storage Buildings "A" and "E" and Railroad Track, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of De Witt Webb, Public Works, Washington, D. C. Frame, Building A, No. 2641, 1 story, 200x100 feet; Building E, No. 2640, 1 story, 80x60 feet, 4,500 feet track and 1,800 square yards of concrete, ready roof, cement floors, roof ventilators. Lowest bidders: Edw. Fay & Son, 2 South Mole street, \$47,470, 90 days; Wm. Linker & Son, 831 Cherry street, \$47,600, 80 days; F. L. Hoover & Son, 1023 Cherry street, \$48,840, 90 days.

Naval Training Camp Extension, No. 2924, League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Bureau of Yards and Docks, C. W. Parks, Chief, Washington, D. C. Frame, 1 and 2 stories, 33 buildings, various sizes, 3-ply ready roofs, yellow pine floors, steam heating, electric lighting, plumbing, painting, plastering, glazing and hardware, ornamental iron work. Lowest bidders: Wm. Linker Co., 831 Cherry street, Philadelphia, \$313,000, 90 days; Chas. Meads & Co., New York City, \$326,000, \$368,200, 90 days; Warren Moore Co., Colonial Trust Building, Philadelphia, \$348,622, 90 days, Item No. 2, \$15,500.

Residence (alts.), 1630 North Franklin st., Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Samuel Englander, Crozer Building, Philadelphia. New bath room, plastering, plumbing. Owner is taking bids. Wm. Linker Co., 831 Cherry street, and Hogg Const. Co., 1634 Sanson street; Specht & Sperry, Heed Building, are figuring.

School (extension), Oak Lane, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Oak Lane Country Day School, Oak Lane, Philadelphia. Brick and stucco, 1 and 3 stories, 80x40 feet, 32x40 feet, 66x50 feet, slate and slag roof, cement and pine floors, metal lath, roof ventilators, stone foundations, tile work, fire escapes, ornamental iron work (heating and lighting reserved). Architects taking bids, due May 14th. Lam Building Co., 1001 Wood street; Specht & Sperry, Heed Building; Wm. R. Dougherty, 1610 Sanson street; John H. Dagney, York Road and Sixty-ninth street; Frank R. Hill, 6700 North Sixth street; Joseph Ashby, Second street Pike; C. L. Hemmerly, Melrose, Oak Lane, and W. John Stevens, Inc., Wyneto, Pa.; Stacey Reeves & Sons, 2011 Market street, are figuring.

Recreation Park, Fifty-seventh and Haverford avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, City of Philadelphia, Board of Recreation, 587 City Hall. Cement coping, iron fence and gates, wire screen, brick work, blue stone curb (plumbing separate bids). Lowest bids submitted by: Robbins Const. Co.,

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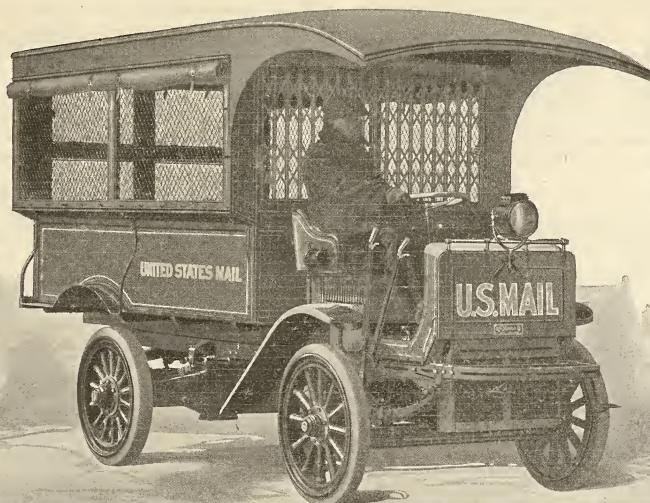
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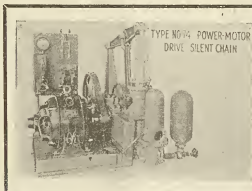
Lafayette Building, \$14,000; Wayne Iron Works, Commercial Trust Building, \$14,900.

Building No. 25, Spec. 2976, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. R. O'Leary, Pay Inspector, Navy Yard, Philadelphia. Reinforced concrete and brick, second story addition, 162x59 feet, steam heating (electric lighting reserved), terrazzo work, fire doors, iron stairs, ornamental iron work, pine floors, electric elevator, safety treads. Owners taking bids, due May 11th at 11 A. M. John N. Gill & Co., Otis Building; W. O. Springer, 1624 Latimer street; F. L. Hoover & Son, 1023 Cherry street; Lam Building Co., 1001 Wood street; Thomas Reilly, 1616 West Thompson street; Ketcham & McQuade, 1029 Brown street; F. A. Havens, 845 North Nineteenth street; Monaghan & Lasso, Inc., 3016 Chestnut street; F. W. Van Loon, Denckla Building; Mark Wardley Co., 1757 Filbert street; Irving & Leighton, 126 North Twelfth street; Wills, Ludwick Co., 34 South Seventeenth street, are figuring.

Garage, 2221 North Broad street, Philadelphia (rear). Architect, F. V. Nickels, 4400 Manayunk avenue, Philadelphia. Owner, Martin J. Powers, on premises. Brick and steel, 1 story, 26x26 feet, slag roof, cement floor, stone foundations (lighting, plumbing and heating reserved), gasoline storage system. Architect and owner are taking bids. E. J. Kreitzburg, 1345 Arch street, is figuring.

School (alts. and add.), D and Indiana avenue, Philadelphia. Architect, J. Horace Cook. Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick toilet addition, 1 story, plumbing-mill work. Owners taking bids, due May 9th. E. C. Durell, 1713 North Twenty-fourth street; Mitchell Bros., 2125 Race street; Standard Const. Co., 1713 Sansom street; J. H. Jordan, Thirty-first and Oxford streets, and Wm. Mundy, 228 S. Alder street, are figuring.

Girls' Southern High School, Broad and Snyder avenue, Philadelphia. Architect, J. Horace Cook. Nineteenth above Chestnut street. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. New wardrobes, cabinet work. Owners taking bids, due May 9th. J. H. Jordan, Thirty-first and Oxford streets; Mitchell Bros., 2125 Race street,



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Commercial Trust Building PHILADELPHIA

and E. C. Durell, 1713 North Twenty-fourth street, are figuring.

Synagogue, 324-26 Fitzwater street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick and stone, 3 stories, 24x137 feet, slag roof, steam heat, electric lighting, tile and marble work, cement work, hardwood floors, leaded glass, metal ceilings. Plans completed. Architect is ready for bids.

Factory (int. and ext. alts.), 620-624 South Seventh street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owners, B. C. Friedman & Son, on premises. Brick, 3 stories, 46x60 feet, new front, brick, flush bulks, plate glass, tapestry brick, tile and marble work, slag roof, pine floors (heating reserved). Plans completed. Owners are taking sub-bids.

Service Building (alts. and add.), northeast corner Broad and Wood streets. Architect, Charles E. Oelschlaeger, 1615 Walnut street, Philadelphia. Owners, Gomery & Schwartz, 128 North Broad street, Philadelphia. Consists of general interior alterations, reinforcing floors, cement work, metal lath, partitions, elevators. Architect will supervise work on day's work basis.

Residence (alts.), 1826 Arch street, Philadelphia. Architect, private plans. Owner, Wm. J. Connelly, 1818 Arch street, Philadelphia. Fire escape, papering and painting, etc. Owner will take sub-bids at once.

Building Operations (9), various sections, Philadelphia, 225 Houses and 120 Garages, ranging from \$3,500 to \$12,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners' names withheld. Brick, stone and stucco, 2 and 3 stories, 16x30 feet to 21x50 feet, various styles, stone foundations, slate, composition and slag roofs, steam heating, hot air and hot water heating, gas, combination and electric lighting, parquetry, hardwood, yellow pine and tile floors, hollow metal skylights, tile and marble work. Plans in progress. Architect will be ready for some bids in a few days.

Residences (67), Twenty-seventh and Allegheny avenue, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick and stucco, stone foundations, 2 stories, 16x55 feet and 16x51 feet, slate and slag roofs, hot

water heating, combination lighting, tile and marble work, hardwood floors, gas ranges. Plans about completed. Owners will be ready for sub-bids May 9th.

Bank Building (add.), Broad and Germantown avenue, Philadelphia. Architect, Philip Merz, Pennsylvania Building, Philadelphia. Owners, North Philadelphia Trust Co., on premises. Brick and limestone, 1 and 2 stories, 20x85 feet, steam heating, electric lighting, hollow metal skylights, metal lath, roof undecid. Plans in progress.

Residence, Germantown, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Albert T. Bauerle, Commonwealth Building, Philadelphia. Stone, 2½ stories, 35x10 feet, slate roof, hot water heating, hardwood floors. Plans about completed. Architect will take bids shortly.

Store House, Office and Oil House, Third and Erie avenue, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Brick. Owners taking bids, due May 20th at noon. F. A. Havens & Co., 845 North Nineteenth street; F. W. Mark Cont. Co., Finance Building; Royhouse-Arey Co., 112 North Broad street; H. E. Baton, 1713 Sansom street, and F. W. Van Loon, Denckla Building, are figuring.

Nurses' Quarters (add.), 2946, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story and 5 stories, 20x80 feet, 20x20 feet, 20x155 feet and 23x56 feet and 18x20 feet, steam heating, ready roof, electric lighting, waterproofing, cement floors. Lowest bidder, Thos. C. Trafard, 1613 Sansom street, Philadelphia, \$46,180, 90 days.

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Shed, Fifteenth and Washington avenue, Philadelphia, \$22,565. Architect, private plans. Owners, U. S. Government, U. S. Marine Corps, 1100 South Broad street. Concrete, brick and steel, 1 story, 94x136 feet, corrugated iron roof, cement floors, electric lighting, rolled steel sash, fire doors. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Ice Plant, Ninth and Washington avenue, Philadelphia, \$3,000. Architects, Mortensen & Co., 405 Lexington avenue, New York City. Owners, American Ice Co., Sixth and Arch streets, Philadelphia. Consists of alterations, mill work, painting, 11 bulkheads on roof. Contract awarded to Wark-Yardley Co., 1737 Filbert street, Philadelphia.

Factory (add.), Sixteenth and Hamilton streets, Philadelphia. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, Wm. Sellers & Co., Inc., on premises. Brick, concrete and terra cotta, 5 stories, 24x44 feet, slag roof, cement and maple floors, metal lath, rolled steel sash, fire doors (heating, lighting and plumbing reserved). Contract awarded to F. A. Havens & Co., 845 N. Nineteenth street, Philadelphia.

Garage, 1204-06-08-10 Parrish street, Philadelphia, \$20,000. Architect, private plans. Owner, Edwin Wolf, 330 North Twelfth st., Philadelphia. Brick, 1 story, 69x139 feet, slag roof, steam heating, electric lighting, cement floors, fire doors, metal window guards, gasoline storage, stone foundations. Contract awarded to P. M. Sax, Franklin Bank Building, Philadelphia.

Garage (fire repairs), Twenty-second and Ludlow streets, Philadelphia, \$5,000. Architect, private plans. Owners, Adams Express Co., Eighteenth and Market streets, Philadelphia. Rubberoid roof. Contract awarded to Charles Gilpin, Harrison Building, Philadelphia.

Stable (alts.), to Garage, Rittenhouse and Pulaski streets, \$4,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Brick, mill

work, plastering, 2 stories, 53x32 feet, steam heating, electric lighting, rolling steel doors, cement floors, hollow tile, metal lath, ornamental iron work. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Garage, 3424 Reach street, Philadelphia (rear), \$4,000. Architect, Wm. C. Pritchett, 416 Walnut street, Philadelphia. Owner, Jacob King, on premises. Brick, 1 story, 54x37 feet and 33x33 feet, slag roof, stone foundations, cement floors, electric lighting. Contract awarded to Alfred Steinhäuser, Geneva and Westford avenue, Philadelphia.

Garage, 1329 East Montgomery avenue, Philadelphia, \$4,000. Architect, private plans. Owner, P. F. Martin, 1335 East Montgomery avenue, Philadelphia. Brick, 1 story, 24x46 feet, slag roof, stone foundations, cement floors, electric lighting (heating and gasoline storage system reserved). Contract awarded to Philip Haibach Const. Co., Twenty-sixth and Thompson streets, Philadelphia.

Foundry and Office Building Extension, Eighteenth and Allegheny avenue, \$45,000. Architect, private plans. Owners, Cresson & Morris, on premises. Brick, 1 story, office building, 202x50 feet; foundry, 100x50 feet, slag roof, cement floors, roof ventilators, stone foundations, hollow metal sash and skylights, fire doors (heating and lighting reserved). Contract awarded to Raith Const. Co., Inc., 304 Master street.

Factory, Tioga and Collins streets, Philadelphia, \$25,000. Architect, private plans. Owners, Dill & Collins, on premises. Brick, 1 story, 146x74 feet, slag roof, cement floors, stone foundations, rolled steel sash, hollow metal skylights, fire doors, roof ventilators (heating and lighting reserved). Contract awarded to Wm. Steele & Sons Co., 34 South Fifteenth street, Philadelphia.

Residence, 8106 Buist avenue, Philadelphia, \$4,500. Architect, private plans. Owner, Chris. Hartman, on premises. Brick, 2 stories, 16x57 feet, slag roof, hardwood floors, hot water heating, combination lighting, stone foundations. Owner will build.

Fomdry Building, Twenty-second and Allegheny avenue, Philadelphia, \$10,000. Engineer, A. G. Warren, 1021 North Delaware avenue, Philadelphia. Owners, Actna Foundry Co., Inc., on premises. Brick, 1 story, 50x70 feet and 20x50 feet, slag roof, 10-ton electric traveling crane. Contract awarded to A. R. Raff Const. Co., 1635 Thompson street, Philadelphia.

Office Building, Bath and Ontario streets, Philadelphia, \$4,500. Architect, private plans. Owners, Berg Co., on premises. Brick, 1 story, 32x42 feet, slag roof, cement floor, electric lighting, stone foundations. Contract awarded to Joseph Levin Co., 1530 South Sixtieth st., Philadelphia.

Factory (add.), Nineteenth and Allegheny avenue, Philadelphia, \$3,500. Architect, private plans. Owners, Electric Storage Battery Co., on premises. Brick, 1 story and 2 stories, 35x18 feet and 14x18 feet, slag roof, cement and pine floors, electric lighting, stone foundations. Contract awarded to Wm. Steele & Sons Co., 30 South Fifteenth street, Philadelphia.

Residences (16), Sixth and Chew streets, Philadelphia, \$65,000. Architect, private plans. Owner, J. M. Faust, 4611 North Broad street, Philadelphia. Stone, 2 stories, 15x44 feet, slag roof, hot water heating, combination lighting, stone foundations, hardwood floors. Owner will build.

Store (alts.), 4925 North Broad street, Philadelphia, \$2,000. Architect, private plans. Owner, Otto Glazer, care of builder. Consists of interior alterations, flush bulks, tile floors. Contract awarded to H. P. Schneider, 3713 Old York Road.

Store, Twentieth and Snyder avenue, Philadelphia, \$1,200. Architects, Hemon & Boyle, Fuller Building, Philadelphia. Owner, John T. Sommers, on premises. Brick, stone work, painting, glazing, 1 story, electric light. Contract awarded to Smith-Hardian Co., 1606 Cherry street.

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PENNSYLVANIA**Construction News**

Garage, Elkins Park, Pa. Architect, H. Rex Staekhouse, 129 South Fifth street, Philadelphia. Owner, Joseph B. Haber, 1010 Race street, Philadelphia. Frame and stucco, 2 stories, 22x20 feet, slate roof, cement floor, steam heating. Plans completed. Architect is ready for bids.

Transmission Filling Houses, Spec. 2974, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, care of W. C. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Too early for details.

Allegheny County Memorial Building, Elizabethtown, Pa. Architect, C. Emilen Urban, Lancaster, Pa. Owners, Grand Masonic Lodge, Elizabethtown, Pa. Stone, 3 stories and basement, 250x80 feet, hot water heating, electric lighting, tile and marble work, rolled steel sash, wood floors, hollow tile, metal lath, metal weatherstrip, waterproofing. Owners taking bids, due May 14th. Pringle Borthwick, 8018 Germantown avenue; Pomeroy Const. Co., 1609 Ramstead street; Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia; Beard Const. Co., Reading, Pa., and Elizabethtown Planning and Mill Co., Elizabethtown, Pa., are figuring.

Fire Tower and alts., Seventh and Penn streets, Chester, Pa. Architect, George M. Ewing, 34 South Seventeenth street, Philadelphia. Owner, Wilby Estate, Chester, Pa. Brick and mill work, 3 stories, slag roof, steam heating, electric lighting, cement and pine floors, metal lath, fire doors, ornamental iron work. Architect taking bids. Hogg Const. Co., 1634 Sansom street, Philadelphia; R. G. Scroggins & Son, Chester, Pa.; R. L. Taylor, Chester, Pa., and S. A. Hewes, Chester, Pa., are figuring.

Factory, Reading, Pa. Architect, private

plans. Owners, Narrow Fabric Co., care of Mr. Mayer, care of Textile Machinery Co., Reading, Pa. Brick and reinforced concrete, 6 stories, 80x100 feet, slag roof, steam heating, electric lighting, cement floors, rolled steel sash. Plans in progress.

Garage, Marietta, Pa. Architect, Granville Pauls, Columbia, Pa. Owner, J. M. Reich, Marietta, Pa. Brick, 1 story, 50x100 feet, composition roof, concrete floors. Plans in progress.

School, Greenland, Pa. Architect, Malvern Evans, Lancaster, Pa. Owners, School Board of East Lampeter Township, Lampeter Township, Pa. Brick, 1 story, 35x40 feet, slate roof, pine floors. Plans in progress.

Residence and Garage, Columbia, Pa., \$8,500. Architect, M. E. Evans, Lancaster, Pa. Owners, the Misses Wisler, Columbia, Pa. Brick, 2½ stories, 32x34 feet and 16x20 feet, slate roof, hot water heating, electric lighting, plumbing. Owners are taking bids. A. C. Scheetz, East Petersburg, Pa., is figuring.

Store Front, Chambersburg, Pa. Architect, Robert A. Stair, York, Pa. Owner, H. W. Skener, Chambersburg, Pa. Brick, 1 story, metal bulks. Owner taking bids.

Store (alts.), 129 North Queen street, Lancaster, Pa. Architect, C. Emilen Urban, Lancaster, Pa. Owner, Harry Harold, on premises. New front, 1 story, 25 feet, metal bulks. Architect taking bids, due as soon as possible. L. V. Wright and Frank Bachman, both of Lancaster, Pa., are figuring.

School, West Manchester Township, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owners, School Board of Manchester Township, Manchester Township, Pa. Brick, 1 story, 4 rooms, slate roof, pine floors, electric lighting. Plans in progress.

Double Houses (4), Oakland Park, Delaware

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County, Pa. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owners, Oakland Park Realty Co., care of T. G. Coulter, Haddon avenue, Camden, N. J. Frame, 2 stories, 14x40 feet, shingle roof, pine floors, hot water heating, electric lighting. Plans in progress. Owners will build.

Family Apartment (for 6 families), Ontario street, Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, Bethlehem, Pa. Owner, Chas. Lowey, 621 Ontario street, Bethlehem, Pa. Brick, 3 stories, 31x51 feet, slag roof, pine floors, plumbing, steam heating, combination lighting. Plans in progress.

Residence, Millers Heights, Pa. Architect, C. F. Spangenberg, 504 Broadway, Bethlehem, Pa. Owner, John A. Blom, 125 East North street, Bethlehem, Pa. Brick, 2½ stories, 34x28 feet, slate roof, pine floors, electric lighting. Plans in progress.

Church and Parish House, Palmerton, Pa. Architect, M. G. Prutzman, Court House, Mauch Chunk, Pa. Owners, St. Cyril Methodist Slavish congregation, Palmerton, Pa. Brick and stone, 1 story and basement, 97x40 feet, slate roof, yellow pine floors, electric lighting, plumbing. Architect taking bids. Butz & Clader, Fifth and Hamilton streets, Allentown, Pa., are figuring.

Foundry and Locker Room, Allentown, Pa. Architect, Robert Ochs, Bethlehem, Pa. Owners, Aldrich Pump Co., Allentown, Pa. Brick, 1 story, 45x63 feet and 14x30 feet, slate roof. Owners are ready for bids.

Moving Picture Theatre and Store, South Bethlehem, Pa. Architect, A. W. Lech, South Bethlehem, Pa. Owner, R. E. Neumeier, South Bethlehem, Pa. Brick, 1 story, 60x100 feet, slag roof, electric lighting, heating undecided. Preliminary plans completed.

Residence, Allentown, Pa. Architects, Rahò & Lange, Allentown, Pa. Owner, Ray Harried, Allentown, Pa. Hollow tile and stucco, 2 stories, slate roof, electric lighting, hardwood floors. Architects taking bids. Ochs Const. Co. and W. H. Gangewere & Co., both of Allentown, Pa., are figuring.

Residence (alts. and add.), Wynnewood, Pa. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, Langdon Lea, Bala, Pa. Interior alterations, 1 story, 14x14 feet addition, shingle roof, hot water heating extension, electric work and fixtures, painting and papering. Architects are sub-letting.

Residence (alts. and add.), Cynwyd, Pa. Ar-

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HEATING

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chitect, Wesley L. Blithe, 608 Chestnut street, Philadelphia. Owner, Mrs. Rudolph Blankenburg, Cynwyd, Pa. New porch, interior and exterior alterations, plumbing, plastering, painting, electric lighting, hot water heating, tile work, slate roof. Architect is supervising work.

Parish House, Garrett Road and Riverview avenue, Drexel Hill, Pa. Architect, private plans. Owners, Episcopalian Chapel of the Incarnation, care of Mr. Cassali, chairman Building Committee, Drexel Hill, Pa. Stone, 1 story and basement, 28x74 feet, slate roof, stone foundations, steam heating, electric lighting, cement and pine floors. Owners are taking bids. Standard Const. Co., 1713 Sansom street, are figuring.

Warehouse, Pottstown, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, Gudebrod Brothers, Pottstown, Pa. Brick, 2 stories, 35x100 feet, slag roof, concrete and pine floors, fire doors. Architects taking revised bids, due as soon as possible. Driscoll Co., Stock Exchange Building, Philadelphia; F. H. Kaiser, and Wm. H. Wiant, both of Pottstown, Pa., are figuring.

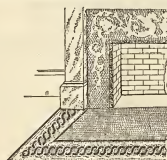
Mill, Clifton Heights, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Clifton Yarn Mills, Clifton Heights, Pa. Brick, 2 stories and basement, 48x130 feet, slag roof, electric lighting. Architect taking bids, due May. St. B. Bornstein, 1510 North Franklin street; Smith-Hardican Co., 1606 Cherry street; Daniel J. McNamee, 1621 North Fifteenth street; J. Howard Roberts, Lansdowne, Pa.; Jordan Bros., Clifton Heights, Pa.; Geo. Riley, Lansdowne, Pa.; James Booth, Garrettsford, Pa., and Nicholas Nardy, 763 South Thirteenth street, are figuring.

Garage and Chauffeur's Quarters, near West Chester, Pa. Architect, E. C. May, Du Pont Building, Wilmington, Del. Owner's name withheld. Stone, 2 stories, 50 feet front and 2 wings, slate roof, cement and wood floors, hot water heating, electric lighting. Plans in progress.

Masonry and Grading, Station avenue, U. G. Bridge, Cornwells, Pa. Architect, private plans. Owners, Pennsylvania R. R. Co., care of J. P. Cullen, assistant engineer, Trenton, N. J. 10,000 cubic yards grading, 1 mile track laying, 1,400 cubic yards concrete, 1,000 yards foundation, safety treads, ornamental iron work. Owners taking bids, due May 14th. A. L. Carhart, Penfield Building, Philadelphia, is figuring.

Laboratory, Doylestown, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, National Farm School, Doylestown, Pa. Brick, 1 story, 42x24 feet and 33x16 feet, tile roof, wood floors, electric lighting. Plans in progress.

Bungalow, Franklin, Pa. Architect, J. Fletcher Street, 129 South Fifth street, Philadelphia. Owner, Mrs. S. H. Bell, Franklin, Pa. Frame, 2½ stories, shingle roof, hot water heating, tile work, electric lighting, hardwood floors, plumbing. Plans in progress. Owner will take bids in two weeks.



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Contracts Awarded

Ammunition Factory, Eddystone, Pa. Architect, private plans. Owners, Eddystone Ammunition Works, Eddystone, Pa. Frame, 1 story, 60x84 feet, slag roof, concrete floors. Contract awarded to R. H. Scroggins & Son, Crozer Building, Wilmington, Del.

Warehouse, Allentown, Pa., \$60,000. Architect, H. L. Anderson, Court House, Allentown, Pa. Owner, H. Soferney Co., Allentown, Pa. Brick, steel and concrete, 3 stories, 160x32 feet, slag roof, steam heating, electric lighting, rolled steel sash, iron stairs, reinforced concrete floors, hollow tile, elevators. Contract awarded to Butz & Clader, Allentown, Pa.

Farm Buildings (4) (alts. and add.), near West Chester, Pa. Architect, E. C. May, Du Pont Building, Wilmington, Del. Owner's name withheld. Stone, 1 and 2 stories, general interior and exterior alterations and sewage disposal plant. Contract awarded to Wm. J. Jones, West Chester, Pa.

Residence (alts.), Media, Pa., \$1,800. Architect, private plans. Owner, A. C. Harvey, 5953 Cobb's Creek Parkway, Philadelphia. Interior alterations, mill work. Contract awarded to P. B. Davis, 240 North Sixteenth street, Philadelphia.

Warehouse (alt. and add.), Huntingdon, Pa. Architects, Charles Hillman & Son, 400 Chestnut street, Philadelphia. Owners, Charles Miller & Sons, Huntingdon, Pa. Brick, general interior and exterior alterations, 3 stories, 58x100 feet, electric lighting, rolled steel sash, fire doors. Contract awarded to Mr. Hall, Huntingdon, Pa.

Freight Station, South Bethlehem, Pa., \$10,300. Architect, private plans. Owners, Lehigh Valley Transit Co., Allentown, Pa. Brick, 1 story, 59x79 feet, concrete and wood floors. Contract awarded to Robt. Rathbun, Bethlehem, Pa.

Clinic House, Allentown, Pa., \$20,000. Architect, H. L. Anderson, Court House, Allentown, Pa. Owners, Hungarian Beneficial Society, Allentown, Pa. Brick and concrete, 1 story, 42x127 feet, slag roof, marbleoid floors, steam heating, electric lighting, tile work, hollow metal sash, metal lath, 3 roof ventilat-

ors. Contract awarded to Butz & Clader, Allentown, Pa.

Fire House, Allentown, Pa., \$17,000. Architect, H. L. Anderson, Court House, Allentown, Pa. Owners, Fearless Fire Co., Allentown, Pa. Brick, 2 stories, 38x112 feet, slag roof, wood floors, steam heating, electric lighting, metal lath. Contract awarded to Butz & Clader, Fifth and Hamilton streets, Allentown, Pa.

Bridge, Chester, Pa. Engineer, F. Long, Norristown, Pa. Owners, City of Chester, Department of Public Property, care of Chief Clerk, City Hall, Chester, Pa. Reinforced concrete, 75 feet long, 26 feet wide. Contract awarded to Wm. G. Tust, Gwynedd Valley, Pa.

Storage Tanks, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owners, Keystone Roofing Manufacturing Co., York, Pa. Reinforced concrete (5), 10½ feet high, 15x70 feet. Contract awarded to A. B. Kraft, York, Pa.

Passenger Station, Edgeley, Pa. Architect, Wm. H. Cookman, Broad Street Station, Philadelphia. Owners, Pennsylvania R. R. Co., Broad Street Station, Pa. Brick, 1½ stories, 39x24 feet, slate roof, pine floors, electric lighting, metal lath. Contract awarded to Fred R. Parker, Trenton, N. J.

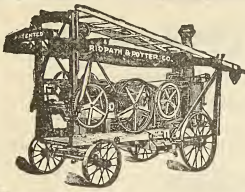
Store (alts.), 12 West King street, Lancaster, Pa. Architect, C. Emel Urban, Lancaster, Pa. Owner, Julius Schafer, Lancaster, Pa. Brick, general interior alterations (heating reserved), electric lighting, marble work, metal bulks. Contract awarded to Frank Bachman, Woolworth Building, Lancaster, Pa.

Restaurant (alts. and add.), Lancaster, Pa. Architect, M. R. Evans, Lancaster, Pa. Owner, Crystal Restaurant, Lancaster, Pa. Brick (general interior alterations), 1 story, 65x14 feet, tile work, plumbing, leaded glass, metal ceilings. Contract awarded to H. L. Wiant, Lancaster, Pa.

Residence, Parkesburg, Pa. Architect, Henry V. Shaub, Lancaster, Pa. Owner, Chester Frankhauser, Parkesburg, Pa. Hollow tile and stucco, 2½ stories, 26x35 feet, slate or asbestos shingle roof, hot water heating, electric lighting, pine floors. Contract awarded to Mr. Kennel, Parkesburg, Pa.

Barn, near Newtown, Pa., \$10,000. Archi-

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tects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, J. J. Tierney, Newtown, Bucks County, Pa. Stone and

frame, 2 stories, 100x100 feet, shingle roof, pine and concrete floors. Contract awarded to C. Yardley Stradling, Oxford Valley, Pa.

NEW JERSEY Construction News

School, Glassboro, N. J. Architect, Verus T. Ritter, North American Building, Philadelphia. Owners, Board of Education, Glassboro, N. J. Too early for details. Plans in progress.

Medicine Factory, Camden, N. J. Architect, private plans. Owners, S. B. Goff & Sons Co., 217 South Second street, Camden, N. J. Brick, 1 and 2 stories, 36x150 feet, slag roof, steam heating, electric lighting, wood floors, hollow metal skylights, fire doors. Owners are taking sub-bids.

Church, Millville, N. J., \$20,000. Architects, Custer & Gill, Camden, N. J. Owners, West Side Methodist Episcopal Church, Millville, N. J. Hollow tile and stucco, 1 story and basement, 47x57 feet, slate or asbestos roof, pine floors, hollow tile, steam heating, electric lighting. Plans in progress.

County Court House (alts. and add.), Belvidere, Warren County, N. J. Architect, H. J. Wenzelberger, Easton, Pa. Owners, Board of Chosen Freeholders, Belvidere, N. J. Brick, fireproof construction, 2 stories, 16x37 feet, slate roof, steam heating, electric lighting, fire doors, iron stairs, reinforced concrete. Owner is taking bids.

School, Princeton, N. J. Architect, Robt.

Sehman, 932 Lambertson street, Trenton, N. J. Owners, Board of Education, care of Mr. Anderson, secretary, R. F. D. No. 3, Princeton, N. J. Brick, 1 story, 115x60 feet (heating, electric lighting and plumbing reserved), slag roof and slate roof, wood floors. Owners will advertise for bids May 14th.

Country Residence (alt. and add.), near Stockton, Hunterdon County, N. J., \$5,000. Architect, Robt. Sehman, 932 Lambertson street, Trenton, N. J. Owner, Frank Epple, Trenton, N. J. Stone, 2 stories, hot water heating, electric lighting, tile and marble work. Architect taking sub-bids.

Store and Dwelling (alt. and add.), Home avenue and Beatty street, Trenton, N. J. Architect, Wm. A. Klemann, First National Bank Building, Trenton, N. J. Owners, Messrs. Rednor & Kline, on premises. Brick, 2 stories and basement, electric lighting, tile work, hollow metal skylights, flush bulk, pine floors, metal ceilings (electric fixtures reserved). Architect taking bids, due May 10th. I. Harper Clayton, American Mechanics' Building; Edw. La Rue, 53 S. Hermitage street, and Samuel Wiley, 517 Monmouth street, all of Trenton, N. J., are figuring.

Miscellaneous Construction News

Boiler House, Wilmington, Del. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Wm. Freihofen Baking Co., Twentieth and Indiana avenue, Philadelphia. Reinforced concrete and brick, 1 story, 44x43 x29 feet, slag roof, cement and brick floors, electric lighting, rolled steel sash, hollow metal skylights (ash and coal handling equipment, boilers and piping reserved). Architects have received bids.

Residence, Eighth and Rodney streets, Wilmington, Del. Architects, E. L. Rice, Jr., Co., Wilmington, Del. Owner, Dr. Chas. M. Allmond, Wilmington, Del. Brick, 3 stories and basement, 27x93 feet, tin and slate roof, stone foundations, electric lighting, tile work, pine floors. Architects have received bids.

Naval Training School Extension, Spec. No. 2925, Hampton Roads, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story. Barracks, 128x27 feet; Latrine, 94x24 feet; Mess Hall, 252x62 feet; Kitchen, 118x

40 feet; Dispensary, 90x123 feet; concrete scrub room, 40x24 feet; Isolation Ward, ready roofing, steam heating, electric lighting, cement and wood floors, plumbing, painting, glazing. Owners taking bids, due May 9th. Cramp & Co., Denckla Building, Philadelphia, are figuring.

Warehouse, Parkersburg, W. Va. Architect, private plans. Owners, Standard Oil Co., Eng. Dept., Elizabeth, N. J. Reinforced concrete and steel, 2 stories, 57x101 feet, slag roof, electric lighting, rolled steel sash and skylights (hollow metal), fire doors, hollow tile. Owner is taking bids. Price Const. Co., Maryland Trust Building, Baltimore, is figuring.

Office Building (alts. and add.) (Toilet Rooms), Dover, Del. Architect, private plans. Owners, Diamond State Telephone Co., Dover Del. Consists of interior alterations, heating extension, electric lighting, mill work, brick work, plastering, plumbing. Contract awarded to Dover Lumber and Milling Co., Dover, Del.

Barn, Marshallton, Del. Architect, R. C.

Tindall, 914 Orange street, Wilmington, Del. Owner, M. Henderer, Maryland avenue and Beach. Frame, 2 stories, slag roof, pine floors. Contract awarded to Gustav Lysander, Wilmington, Del.

Maryland

Construction News

Dwellings (531), Dundalk, Md. Architect, Edw. L. Palmer, 519 North Charles street, Baltimore, Md. Owners, Liberty Housing Co., 330 North Charles street, Baltimore. Concrete foundations, hollow tile and stucco, 2½ stories, slate roof, combination lighting (heating reserved), dampproofing, concrete floors, plumbing. Architect taking bids. H. D. Watts Co., Garrett Building, Baltimore; Jarrett Chambers Co., 30 East Forty-second street; J. Lowrey, Jr., 8 West Fortieth street, and Mark C. Frederick, 321 Madison avenue, all of New York City, are figuring.

Residences (3), Gold street, near Pennsylvania avenue, Baltimore, Md. Architect, F. E. Beall, 1335 Gilmore street, Baltimore, Md. Owner, Daniel Eidman, 2205 Pennsylvania avenue, Baltimore, Md. Brick, 2 stories, tin roof, hot air heating, plastering, painting, plumbing. Owner taking bids. J. C. Clark & Son, 2038 North Fulton avenue, Baltimore, is figuring.

Maryland

Contracts Awarded

Factory (alts.), Holliday and Hillen streets, Baltimore, \$30,000. Architect, private plans. Engineer, L. L. Reeder, on premises. Owners, Maryland Color Printing Co., on premises. General interior alterations. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore.

Dwellings (294), St. Helena, Md. Architect, E. L. Palmer, 513 North Charles street, Baltimore, Md. Owners, U. S. Shipping Board, Lexington Building, Baltimore. Brick foundations, frame and stucco, asphalt, slate and shingle roof, electric lighting, 4 kitchens and mess halls and boiler house. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore.

Residences (4), 1668-90 and 1681-1703 Darley avenue, Baltimore, Md. Architects, Callis & Callis, 2055 Kennedy avenue, Baltimore, Md. Owners, Frank Novak Realty Co., 2401 Harford avenue, Baltimore. Brick, 2 stories, tin roof, hot air and hot water heating, electric lighting, plastering, painting and plumbing. Owners are taking sub-bids.

Office Building, Fort avenue, near Fort McHenry, Baltimore, Md., \$15,000. Architect, private plans. Owners, Baltimore Dry Docks and Ship Building Co., on premises. Concrete, steel and brick, 2 stories, 20x85 feet, slag roof, steam heating, electric lighting, hollow metal skylights, ventilators, dampproofing, hollow tile, plastering. Contract awarded to West Const. Co., American Building, Baltimore.

Building (alts. and add.), Ruxton, Md. Architects, Smith & May, Calvert Building, Baltimore, Md. Owner, C. C. Macgill, 110 Commerce street, Baltimore, Md. Frame, 2½ stories, tile roof, electric lighting, elevator, tile work, hardwood floors, dumb waiters. Contract awarded to Frairie Bros. & Haigley, 18 Clay street, Baltimore, Md.

Administration Building, Camp Meade, Md. Architect, private plans. Owners, Jewish Welfare Works, Camp Meade, Md. Frame, 1 story, 60x20 feet, ready roof, pine floors, electric lighting. Contract awarded to Cogswell-Koether Co., 406 Park avenue, Baltimore, Md.

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, Lycoming and Marshall streets, \$600. Mr. Biermester (O), on premises. John H. Cloak, Jr. (C), 5421 N. Fifth street. Brick, 1 story, 16x15 feet, slag roof.

Theatre, Broad and Lombard streets, \$20,000. Dunbar Theatre Corp. (O), 427 South Broad street. Alex. Chambley (C), Twenty-first and Summer streets. Reinforced concrete, 65 feet high and 69x129 feet, slag roof, steam heat.

Garage, Cemetery avenue and B. and O. R. R., \$800. George H. Farrell (O and C), 6355 Greenway avenue. Stone, 1 story, 30x75 feet, slag roof.

Garage, Rector and Main streets, \$2,500. Imperial Woolen Co. (O and C), Main and Rector streets. Brick, 1 story, 35x30 feet, slag roof.

Warehouse, Arimingo and Huntingdon sts., \$10,000. John T. Lewis & Bros. Co. (O), Lafayette Building. Turner Concrete Steel Co. (C), 1713 Sansom street. Brick, 1 story, 18x108 feet, slag roof.

Dwellings (2), Nixon and Fountain streets, \$5,000. Philadelphia Paper Manufacturing Co. (O), Manayunk. Barclay White & Co. (C), 1713 Sansom street. Reinforced concrete, 2 stories, 16x29 feet, slag roof, steam heating.

Garage, Cumberland and Broad streets, \$25,000. Miss Florence E. Hall (O), 804 North Carlisle street. Henry P. Schneider (C), 3713 York Road. Brick, 1 story, 76x150 feet, slag roof.

Garages (4), 600-06 rear of Luray street, \$1,000. Marco Marks (O and C), 5915 Christian street. Brick, 1 story, 16x12 feet, slag roof.

Dwellings (4), 1913-19 Haworth street, \$10,000. Elizabeth Osborne (O), 5017 Duffield street. George R. Osborne (C), 5017 Duffield street. Brick and frame, 2 stories, 15x25 feet, slag roof, hot air heating.

Garage, 105 West Upsal street, \$1,600. Chas. Atherton (O). Wm. C. Wright (C), 22 Harvey street. Stone, 1 story, 22x22 feet, slate roof.

Dwellings (4), 1201-07 Wakeling street, \$22,000. C. West & Co. (O and C), Oxford avenue and Wakeling street. Brick, 3 stories, 16x35 feet, slate and tin roof, hot air heating.

Garage, Second and Luzerne streets, \$750. Connelly & Comic (O and C), on premises. Brick, 1 story, 12x30 feet, slag roof.

Dwellings (14), 4602-28 Warnock street, \$49,000. William J. Baltz (O and C), 709 Butler street. Brick, 2 stories, 15x44 feet, slag roof, hot water heating.

Garage, 1329 East Montgomery avenue, \$4,000. P. F. Martin (O), 1353 East Montgomery avenue. Philip Hahbach Cont. Co. (C), 1261 N. Twenty-sixth street. Brick, 1 story, 24x46 feet, slag roof.

Dwellings (56), Peace, Warrington and Florence streets, \$135,600. Ferguson & McDowell (O and C), 1003 South Fifty-first street. Brick, 2 stories, 16x34 feet, slag roof, hot air heating, stone foundations.

Garage, 4939 Germantown avenue, \$390. N. G. Toplis (O), on premises. M. Moister & Co. (C), 3931 North Fifth street. Iron on iron, 16x15 feet, 1 story.

Garage, 6386 Overbrook avenue, \$360. Sam J. Bunting (O), on premises. M. Moister Co. (C), 3931 North Fifth street. Iron on iron, 17x18 feet, 1 story.

Shed, 2314 Huntingdon street, \$350. Albert Pleis (O), 2316 Huntingdon street. M. Moister Co. (C), 3931 North Fifth street. Iron on iron, 13x22 feet.

Factory, Tigra and Richmond streets, \$25,000. Dill & Collins (O), on premises. Wm. Steele & Sons Co. (C), 30 South Fifteenth street. Brick, 1 story, 146x74 feet, slag roof.

Tank, Hope and Palmer streets, \$2,200. Alex. McCallum (O), North Nampton, Mass. Stewart Bros. (C), 2526-28 North Orkney street. Steel tower for 10,000 gallon tank.

Dwelling, 8106 Buist avenue, \$4,500. Christopher Hariman (O and C), 8106 Buist avenue. Brick, 2 stories, 16x51 feet, slag roof, hot water heating.

Dwelling, 115 East Mt. Airy avenue, \$2,500. J. D. Pyrah (O), 121 East Mt. Pleasant avenue. Stokes Bros. (C), 6723 Musgrave avenue. Interior alterations and new porch, 16x8 feet.

Store and Dwelling, Iseminger and Shunk streets, \$1,000. Abe Krone (O), 2520 South Iseminger street. B. Shestack & Co. (C), 528 Reed street. Alterations.

Store and Dwelling, 414 South Fifth street, \$800. B. Cohn (O), 414 South street. B. Bornstein (C), 1510 North Franklin street. New flush bulk.

Store and Dwelling, Seventeenth and South streets, \$5,000. Sternberg Bros. (C), 1644 South street. B. Bornstein (C), 1510 North Franklin street. Interior alterations and new flush bulk.

Boiler Room, 3252 Goodmore street, \$500. D. H. Stroud (O), 3240 North Broad street. John Stongt (C), Butler and Thirteenth sts. Brick, 1 story, 10x22 feet, slag roof.

Dwelling, 317 Snyder avenue, \$600. David Weiss (O), on premises. Louis Solgonik (C), 538 Mercy street. Brick, 2 stories, 12x12 feet, slag roof.

Store, 1540 Market street, \$850. Ed. Wolf (O), Empire Building. Bash Co. (C), 1420-36 South Front street. Flush bulk.

Factory, 1543 Ruan street, \$4,400. A. O. Franklin (O), on premises. Rush Bros. (C), 1100 Filmore street. Fire repairs, flooring and roofing.

Factory, Parkside avenue, east of Fifthth, \$9,000. Cunningham Piano Co. (O), 4950 Parkside avenue. Doyle & Co. (C), 1524 Sansom street. Brick, 1 story, 74x156 feet, slag roof.

Storage Bin, American and Susquehanna avenue, \$1,000. Enterprise Manufacturing Co. (O and C), Third and Dauphin streets. Ash bin, concrete and steel.

Shed, Broad and Walnut streets, \$550. Liberty Auto Exchange (O), 1540 Callowhill st. D. A. McClelland (C), 4011 Baring street. Frame shed, 24x74 feet, 12 feet high.

Store, 1024 Chestnut street, \$600. Charles Pomerantz (O), on premises. Hayes Mendenhall & Son (C), Drexel Building. New flush bulk in rear and alterations.

Dwelling, 1413 South Beulah street, \$700. Sandillo Leonardo Estate (O), on premises. Louis Moeli (C), 8415 Ashwood street. Brick, 2 stories, 11x15 feet, slag roof.

Garage, Fifty-third and Walton streets, \$800. Robert Caterson (O), on premises. Ed. Holland (C), Upper Darby. Brick, 1 story, 17x17 feet, slag roof.

Shop, 1230 Summer street, \$1,200. Benjamin Alexander (O), 1326 Chestnut street. Frank Lucci (C), 1603 Ellsworth street. Brick, 1 story, 20x35 feet, stone foundations, slag roof and alterations.

Office Building, Dyatt and Delaware Road, \$1,000. Lehigh Coal Co. (O), Pier 75 North. F. A. Havens & Co. (C), 845 N. Nineteenth st. Brick, 1 story, 9x20 feet, slag roof.

Dwelling, 1129 South Marshall street, \$600. Thos. Angelo (O), on premises. Frank Donato (C), 825 Moore street. Brick, 2 stories, 11x12 feet, slag roof.

Store and Dwelling, 1444 South Eighth st., \$400. Chas. Weinstein (O), Fifteenth and McKean streets. Joseph Carlucci (C), 1030 Mifflin street. New front and alterations.

Dwelling, 1176 South Eleventh street, \$700. Gustino Sciarra (O), on premises. Charles Testa (C), 1112 Annin street. Brick, 2 stories, 13x14 feet, slag roof and alterations.

Service Building, Broad and Cherry streets, \$100,000. Gomery & Schwartz (O), on premises. Cramp & Co. (C), 801 Denckla Building. Partitions and interior alterations.

Dwelling, 115-17 South Nineteenth street,

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, Broad and Toronto sts., \$500. Sadie Reamer (O), 307 Queen street. Joseph Reamer (C), 2221 Germantown avenue. Alterations.

Foundry, Twenty-second and Allegheny avenue, \$3,000. Aetna Foundry Co. (O), on premises. A. Raymond Ruff Cons. Co. (C), 1685 Thompson street. Brick, 1 story, 100x21 feet and 50x52 feet, slag roof.

Smoke Stack, Eighth and Callowhill sts., \$850. Kingan Provision Co. (O), on premises. Philadelphia Boiler Works (C), 1737 Filbert street. Alterations to stack.

Store and Dwelling, 2021 North Fifth st., \$350. Bernard Costello (O), on premises. John Gallatig (C), 447 West Dauphin street. Alterations.

Dwelling, 314 South Sixtieth street, \$2,700. John F. Graham (O), 55440 Lansdowne avenue. John P. Fallon (C), 449 South Sixtieth street. Brick, 2 story front, 16x7 feet, 2 story rear, 16x12 feet, slag roof.

Store and Dwelling, 2549 North Spangler street, \$500. J. Danner (O), Huntingdon and Ridge avenue. P. McShane (C), 2509 North Thirty-fourth street. Fire repairs.

Garage, 4953 Rubicum avenue, \$1,840. Robert Burns (O), on premises. William Joyce (C), 6333 Bayntore street. Brick, 1 story, 29x20 feet, slag roof (add.), and fire repairs.

Dwelling, 4852 Tacony street, \$700. E. Williamson (O), on premises. George R. Osborne (C), 5017 Duffield street. Brick, 1 story, 16x12 feet, slag roof.

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

\$3,000. Y. W. C. A. (O), on premises. R. C. Ballinger (C), 218 North Thirteenth street. Brick, 4 stories, 14x11 feet, and 1 story, 5x16 feet, and alterations.

Storage Building, Gray's Ferry avenue and Thirty-sixth street, \$4,500. D. B. Martin Co. (O), on premises. Henry P. Friend (C), Norristown, Pa. Brick, 1 story, 50x150 feet, ruberoid roofing, cement floors.

Stable, 232 Bainbridge street, \$3,000. A. Rubin (O), on premises. J. Levey (C), 1404 South Sixth street. Brick, 2 stories, 17x33 feet, slag roof, cement floor.

Boiler House, 240 East Ashmead street, \$500. Royal Ass. Knitting Co. (O), on premises. Joseph Thuman Co. (C), 92 Collum street. Brick, 1 story, 12x37 feet, slag roof, cement floor, stone foundation.

Boiler House, Seventeenth and Girard avenue, \$2,500. St. Joseph's Hospital (O), on premises. James Johnston (C), 1721 Ludlow street. Coal vault, stone and reinforced concrete.

Dwelling, 3623 North Seventh street, \$600. Harry Warren (O and C), 3619 North Seventh street. Brick, 2 stories, 14x14 feet, slag roof.

Apartments, 1534 North Eighteenth street, \$2,000. James F. Seiberlieh (O), 1541 North Gratz street. E. E. Hollenback, Inc. (C), 1804 Brandywine street. Brick, 2 stories, 14x18 feet, and interior alterations.

Warehouse, 510-14 Cuthbert street, \$20,000. Supplee Biddle Hardware Co. (O), 517 Commerce street. H. H. Burrell (C), 206 Quince street. Fire tower and alterations.

Apartments, Park and Berks streets, \$2,500. Mrs. J. K. Willington (O), on premises. J. Frank Grant (C), 1625 North Thirteenth st. Brick, 2 stories, 13x19 feet, slag roof.

Dwelling, 826 South Forty-eighth street, \$3,000. L. J. M. Calvert (O), on premises. L. Smith (C), 4007 Chester avenue. Interior alterations and new partitions.

Garage, 3424 Beach street (rear), \$4,000. Jacob King (O), on premises. Alfred Steinhäuser (C), Westford Road and Geneva avenue. Brick, 1 story, 54x37 feet and 33x23 feet, slag roof, cement floor, stone foundations.

Tank Support, 2626 Martha street, \$365. M. & A. Leberman (O), on premises. Conneen Const. Co. (C), 1737 Filbert street. 7,500 tank support, reinforced concrete slab.

Garage, Twenty-second and Ludlow streets, \$4,000. Adams Express Co. (O), Eighteenth and Market streets. Charles Gilpin (C), Fifteenth and Market streets. Repair fire damage.

Dwelling, 908 Gilham street, \$500. Jacob Rilling (O), on premises. G. F. Simon (C), 1023 Unroch street. Brick, 1 story, 8x16 feet, tin roof.

Dwelling, 1152 Morey street, \$300. Gus Spina (O), on premises. John Magaldi (C), 815 Kimball street. Brick, 1 story, 11x10 feet, slag roof.

Stable, 1021 Buttonwood street, \$1,000. Union Transfer Co. (O), Real Estate Trust Building. F. R. Davis (C), 240 North Sixteenth street. New cement floor and alterations.

Stable, 3349 North Water street, \$700. Frank Wheeler (O), 3347 North Water st. John W. Mortimer (C), 3024 E street. Brick, 1 story, 25x16 feet, slag roof.

Storage, 1322 Washington avenue, \$4,000. Penn Chemical Works (O), 1332 Washington avenue. The Austin Co. (C), Bulletin Building, Philadelphia. New roof and steel trusses.

Store and Dwelling, 611-13 South Second street, \$475. A. Barnach (O), on premises. Nathan Rozinsky (C), 520 Dickinson street.

Brick, 1 story, 18x8 feet, stone foundations, skylight over top.

Office Building, Boston and Almond streets, \$1,275. William Cramp Ship Building (C), Beach and Ball streets. Willard Myers (C), 2000 East Cambria street. Brick, 1 story, 9x23 feet, slag roof.

Factory, Jasper and York streets, \$1,200. Penn Worsted Co. (O), on premises. Hugh Hazlett & Son (C), 1701 North Twentieth st. Brick, 1 story, 26x34 feet, slag roof.

Garage, 5409-11 Wyalusing avenue, \$1,500. J. D. Loper (O and C), on premises. Brick, 1 story, 40x34 feet, slag roof, stone foundations.

Dwelling, 821 Northeast Boulevard, \$800. C. Myers (O), on premises. Harry Hautman (C), 342 Porter street. Brick, 1 story, 16x8 feet and 12x14 feet, slag roof, stone foundations.

Dwelling, 2705 East Indiana avenue, \$300. Charles Bursinger (O and C), on premises. Brick, 1 story, 12x10 feet, slag roof.

"I suppose that most people want their building material on time," said the Sweet Young Thing.

"Well, not all of them," replied the Dealer. "A few pay cash."—Ex.

Professor—"What is the first mention of a building material dealer in history?"

Student—"I don't know, but somebody put a lien on the tower of Pisa."—"Building Age."

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

A certain wallboard man advertised in the Guide for awhile and then dropped out. We've had a dozen inquiries since then, asking for his address—every inquiry from a cash buyer. This is a common occurrence. It's hard to make some advertisers see the vital importance of a standing "ad."

Fifty years ago the grocer set out a keg of mackerel and a box of kindling wood, and sat down to wait for customers. Today he carries street-car and newspaper advertising and dresses his windows as smartly as the department store. If it didn't pay he'd still be sitting behind the stove waiting for customers with a mackerel keg out front doing service for a sign.

Don't be discouraged if you make an occasional mistake; if men didn't there wouldn't need to be any claw on a hammer.

Advertising is nothing more nor less than good salesmanship reduced to print. The business man who can put "sales talk" into type has learned the cardinal principle of good advertising.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A carload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

I make it a rule never to write a grouchy letter—I telephone.

That plan of the king in olden times who killed the messenger who brought him bad news has my approval. Blessed are those who bring glad tidings! If you cannot write a good letter—don't!—Elbert Hubbard.

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

A hen is the only kind of a critter that can produce something by sitting down and doing nothing.—Exchange.

Portland Cement, Sand or Gravel by the carload. Consult DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.		Floor Plates.		Refrigerators.	
Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.		Alan Wood Iron and Steel Co., Widener Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.	
Bidpath & Potter Co. Bourse Bldg., Phila.		Furnaces and Ranges.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.	
John B. Rulon. 1355 Colwyn st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Reinforcing Bars.	
Artists' and Architects' Supplies.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.		Truscon Steel Co. Commonwealth Bldg., Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Keystone Supply & Mfg. Co. 931 N. 9th st., Phila.		Roofing.	
Warren-Knight Co. 136 N. 12th st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		The Barrett Co. New York City and Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Garage (Portable)		Roofing Tile.	
Blue Prints.		Service Equipment Co. Bourse Bldg., Phila.		O. W. Ketcham. Builders' Exchange, Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Granite.		Scales.	
F. Weber & Co. 1125 Chestnut st., Phila.		Holmesburg Granite Co., Commercial Trust Bldg., Phila.		The Fairbanks Co. 7th and Arch sts., Phila.	
Blue Print Paper.		Hauling Contractors.		Sewer Pipe and Flue Linings.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Barber Contracting Co., 1127 Land Title Bldg., Phila.		C. F. Shellenberger. Builders' Exchange, Phila.	
Brick (Face, Etc.).		Heating Contractors.		Sewage Disposal.	
O. W. Ketcham. Builders' Exchange, Phila.		Bowers Bros. & Co. 1629 Ludlow st., Phila.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Brick Renovating.		Heating Boilers.		Soundings.	
Adolph Christensen. 1433 Brown st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Builders.		Fleck Bros. Co. 44 N. 5th st., Phila.		Bidpath & Potter Co. Bourse Bldg., Phila.	
Hogg Construction Co., Inc., 1634 Sansom st., Phila.		Keystone Supply & Mfg. Co. 913 N. 9th st., Phila.		John B. Rulon. 1355 Colwyn st., Phila.	
Mitchell Bros. 2125 Race st., Phila.		Insurance.		Sprinklers.	
Pomeroy Const. Co. 1609 Ranstead st., Phila.		Harris J. Latta. Penna. Bldg., Phila.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Builders' Supplies.		Insurance Co. of North America, 3rd and Walnut sts., Phila.		Surety Bonds.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Lighting Fixtures.		Harris J. Latta. Penna. Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		Staman & Dickey. 30 S. 16th st., Phila.		Terra Cotta (Architectural).	
Builders' Equipment.		Lumber.		O. W. Ketcham. Builders' Exchange, Phila.	
Service Equipment Co. Bourse Bldg., Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.		Test Borings.	
Cement.		Marble Mosaic.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Belfi Bros. & Co. 1923 Market st., Phila.		Bidpath & Potter Co. Bourse Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.		John B. Rulon. 1355 Colwyn st., Phila.	
Lehigh Portland Cement Co., Finance Bldg., Phila.		Roman Mosaic and Tile Co. 435 Green st., Phila.		Tile and Terrazza Work.	
Columns (Metal).		Metal Lath.		Belfi Bros. & Co. 1923 Market st., Phila.	
Pearce Fireproof Co. 1345 Arch st., Phila.		General Fireproofing Co., Pennsylvania Bldg., Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.	
Composition Flooring.		Pearce Fireproof Co. 1345 Arch st., Phila.		Roman Mosaic and Tile Co. 435 Green st., Phila.	
The Barrett Company, New York and Philadelphia.		Truscon Steel Co. Commonwealth Bldg., Phila.		Ventilators.	
Philadelphia Mineral Flooring Co., 5632 Summer st., Phila.		Meters.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Woodoleum Manufacturing Co., 203 Liberty Bldg., Phila.		Philadelphia Meter Co., Real Estate Trust Bldg., Phila.		Wall Board.	
Dampproofing.		Mill Supplies.		Cell Board.	
The Barrett Co. New York City and Phila.		The Fairbanks Co. 7th and Arch sts., Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.	
Drawing Materials.		Service Equipment Co. Bourse Bldg., Phila.		Water Paint.	
Charles H. Robbins. 125 S. 11th st., Phila.		Paints and Varnishes.		Wm. B. Southern, N. W. Cor. 12th and Spruce sts., Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Pipe Fittings and Valves.		Waterproofing.	
Electrical Construction.		The Barrett Company, New York and Philadelphia.		The Barrett Co. New York City and Phila.	
Baird-Osterhout Construction Co., 1620 Chancellor st., Phila.		Felton, Sibley & Co. 136 N. 4th st., Phila.		Water Supply.	
Elevators.		Plumbing Fixtures.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
A. B. See Electric Elevator Co., Colonial Trust Bldg., Phila.		Fleck Bros. Co. 44 N. 5th st., Phila.		Weather Strip (Metal).	
Engineers' Supplies.		James A. Vogel Co. Wilmington, Del.		Diamond Flexible Metal Weather Strip Co., Geo. R. C. Johnston. Drexel Bldg., Phila.	
Charles H. Robbins. 125 S. 11th st., Phila.		Keystone Supply & Mfg. Co. 913 N. 9th st., Phila.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
Warren-Knight Co. 136 N. 12th st., Phila.		Preservatives (Wood and Concrete).		Window Screens.	
F. Weber & Co. 1125 Chestnut st., Phila.		The Barrett Co. New York City and Phila.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
Fences.		Ranges.		Wire Work.	
Anchor Post Iron Works, Real Estate Trust Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Audubon Wire Cloth Co., Inc. Audubon, N. J.	
Fire Doors.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.			
Merchant & Evans Co., 2035 Washington ave., Phila.		Richardson and Boynton Co. 1332 Arch st., Phila.			
Fireproofing.					
General Fireproofing Co., Pennsylvania Bldg., Phila.					
Pearce Fireproof Co. 1345 Arch st., Phila.					
Truscon Steel Co. Commonwealth Bldg., Phila.					

1792

1918

Insurance Company of NORTH AMERICA

PHILADELPHIA



126th Annual Statement	December 31, 1917
Cash Capital - - -	\$ 4,000,000.00
Reserve for Premiums - - -	10,830,740.40
Reserve for Losses - - -	4,419,000.00
Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
Losses Paid Since Organization - - -	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance	Automobile	Cotton Insurance
Tornado	Use and Occupancy	Marine
Sprinkler	Builder's Risk	Rent
Explosion	Tourist	Leasehold
Inland Transit	War Risk	Parcel Post
Salesman's Floater		Registered Mail



TRADE MARK
Reg. U. S. Pat. Office

Expanded Metal, Metal Laths, Self-Sentering, Fireproof Building Specialties and Waterproofings

Are you familiar with the economy features of these materials? If not let us supply you with details and quote you on your requirements.

THE GENERAL FIREPROOFING CO.

1119 Pennsylvania Building
Philadelphia, Pa.

Prompt Deliveries from our Philadelphia Warehouse

BUILDERS' SUPPLIES

To be assured of prompt deliveries of the best grades of

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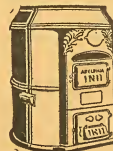
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May 15, 1918

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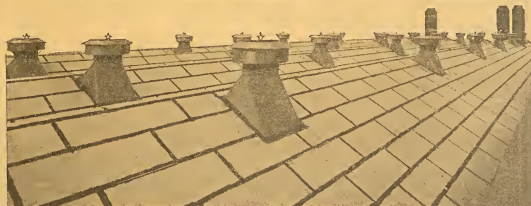
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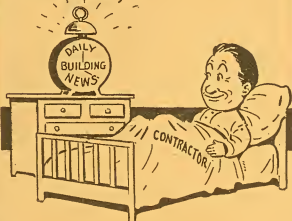


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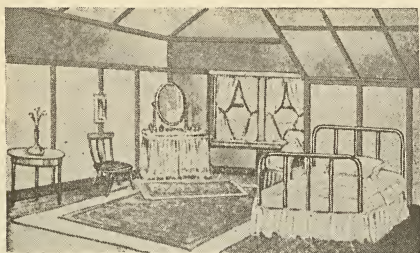
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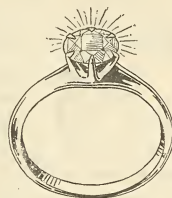
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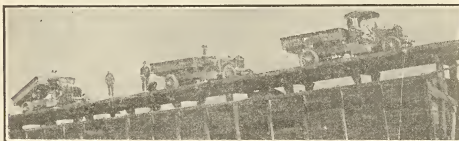
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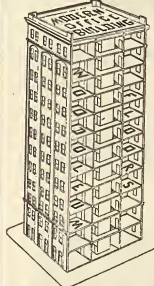
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Number 20

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May 15, 1918

BUILDERS' GUIDE

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As The Editor Sees It



IN the present day aim toward greater efficiency in every phase of existence, it will certainly be a matter for wonderment and regret if an American Quantity System on behalf of which so much has been written and argued, is not generally adopted by architects and builders.

The use of such a system would do much toward attaining the ideals set forth at the recent meeting of the National Association of Builders Exchanges. Certainly the present methods of competitive bidding among building contractors do not tend to raise the trade to the dignity of a profession which was the ideal expressed in the code of ethics for builders at the meeting of Builders' Exchanges referred to above. The present "Stone Ax" methods, as one writer calls them, are anything but profitable, and the time is at hand when if a thing is not done efficiently it we're better left undone.

In a paper read before the Seventh Avenue Convention of the Society of Constructors of Federal Buildings at Washington, D. C., G. Alexander Wright gives a most detailed and interesting view as to just what a Quarterly System should be and what it should accomplish.

AN AMERICAN QUANTITY SYSTEM.

The Quantity System (something incorrectly referred to here as Quantity Survey, Quantity Survey System), is in successful use in various forms in most English speaking countries. In the

United States certain of the principles or portions of the Quantity System are in use, for example, in the U. S. War Department, certain municipalities, among engineers also (rather than architects) the tendency has been in this direction. We already use unit prices. Lumber and hardware lists are prepared in detail for the purpose of getting prices. We have competent computers (notably in the Treasury Department itself), but we do not go far enough. We are also woefully lacking in the very first elements of the Quantity System, viz., a convenient standardization of the modes of measuring mechanic's work in every trade, which goes to make up the building business. It is only necessary here to mention one illustration, namely, the "perch" standards as applied to stonework, and which differ according to locality.

The creation of proper standards of measurements is quite essential. Owing to different local customs and practice, it may not be convenient to make all standards universal; that is just one detail for study and investigation.

The essence of the Quantity System lies in its absolute fairness to both contractor and owner, the former being paid and the latter paying, only according to measurement of work. Guesswork is eliminated. Everything in a building can be and is, definitely measured and described in the document known as the Bill of Quantities. Clear, carefully prepared drawings, details, and specifica-

tions are essential. Such, for example (and I am glad with the opportunity of saying this), as some which have been issued by the Treasury Department for post offices, etc., and which I have had the opportunity of examining.

The drawback of the present Estimating System, or rather want of system, are many. They are universally known and admitted. Briefly, however, it will serve the present purpose to recall a few of the most serious.

First, there is the enormous waste of time and money, by bidders all going over the plans and specifications, all doing the same thing, all covering the same ground, without arriving at the same result, in fact, competing with each other as to how much material a building will take, each one apparently trying to see how little he can take off; anything, so long as he can beat the other fellow. This is gambling, not competition, nor legitimate estimating, consequently when it comes to pricing the items it is obvious that the bidders are more or less handicapped, no two bidders start on the same basis. No two bid on the same quantity of materials or labor. Some may be about right, others have too much, others too little. These latter are the men who, through their mistakes in taking "short" quantities as it is termed, so often land a job and beat the more competent bidder, who by being extra careful and accurate, does succeed in getting his quantities off more correctly, but if the truth must be told, the more careful and accur-

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ate a bidder is the less chance he has of getting a job. Is any system which favors those who make the biggest mistake commercially sound? Is it business? Is it worthy, let me ask, of a government department? Does this loose method pay those who put up buildings in the long run? Is it the best we can do?

The trouble which superintendents and architects have with a certain class of contractors in carrying on work, does not arise so much from the contractor's desire to make an unfair profit, as it does from his efforts to keep his losses down as much as possible, or at least to "break even," as we say. What would any man do under similar conditions? It is our wretched system, not the bidder, which is at fault. The lowest bid, which is the one most generally accepted, is usually anything but the most accurate (except from the owner's viewpoint) and correspondingly, the bidder is, under present methods, not always able to give the best service, for that reason. So true is this in private work, let on the so-called competitive system, that the average building contract, from start to finish, has degenerated into a game of chance, a gamble, an unhealthy contest. Such uncertainty is in itself a disturbing element. Why should not all bidders figure on identically the same thing? from the same starting point? The quantity of work in a job is the same, whichever bidder does it. Why should they not all figure on that quantity? Unless it be that owners want to see who will make the greatest "mistake." On the other hand is not an owner entitled to know, if he so wishes, what he is going to get, before he binds himself to pay out a large sum of money? If the same owner was about to buy a large tract of land, we will say of irregular shape and grade, he would want every detail and boundary definitely fixed, every corner clearly defined, but this same man, owing to a questionable custom, will sing a building contract for half a million or more, and what does he know about it? or what is he going to get? He has seen a picture of his building, but it is a long thorny stretch between that and the finished structure, which he expects to get, for a certain price. He has seen the drawings and specifications, and perhaps the details. Granting all this, there is still to him a sort of mystery about how the cost of his work is arrived at. He understands very little about it and but few will take the trouble to enlighten him.

If, however, an owner could see some document in real figures, a list of everything that he is going to get for his money he would be surprised at the quantity of it. He could see that much, and would be far less liable to think that contractors cost of his building up unnecessarily.

The mass of figures and information that a Bill of Quantities presents would appeal to him because he could read and understand figures far better than he can read drawings. There should be no mystery about this plain matter of fact business requirement. There is no unsurmountable privacy nowadays in such things, the period so of the trade guilds and accompanying secrets are over, only the traditions remain. This idea of keeping all such information from the owner, which is more or less prevalent, is a false notion, a survival of bygone times. There should be no mystery at all about it.

It would be interesting to know how many, or what percentage of the contractors themselves could, if put to the test, take a set of plans and specifications for a quarter of a million dollar office building of to-day, and personally take off all the quantities in detail in each trade and price same correctly without assistance. Very few. Yet many private owners think that is what is done, and that is why they expect so much from the contractor. Such work requires training; it is not merely a question of mathematics, as some may suppose. A knowledge of architecture, sound construction, and engineering is essential in a competent Quantity Surveyor, but this phase of the subject is something which is very little understood in this country—as yet.

Old customs die hard, but they never died more rapidly than they do in the present age, because it is a progressive age and we are a progressive people, ready to adopt that which is good or more efficient, and to drop that which, owing to modern advancement and science, has become insufficient, and which is the case with our estimating methods, good enough, perhaps, in the period of tallow candles, but insufficient for to-day. And it is this fact which is largely responsible for the cutthroat practices adopted by bidders themselves, and which have brought the building business of the country into a degenerate condition, so that it is next to impossible for an honest man to remain in the business and pay one hundred cents on the dollar if he relies upon competitive figuring to get work.

The Quantity System possesses many advantages; among others, the professional Quantity Surveyor is specially trained for this particular work. He is expert in examining and checking drawings, details and specifications, their clearness and accuracy, particularly so from the estimating viewpoint. Occupying, as he does, an independent position, he can afford to be more critical than any bidder when figuring a job. It is his business, his very training promotes an analytical frame of mind. He

is paid for this, bidders are not. Should bidders discover any error or omissions in plans and specifications, and they often do, they do not tell other competitors, or at least not until after the low man has signed up.

When the Quantity Surveyor discovers any omission or discrepancy, small or large, it is during the period of his friendly collaboration with the architect himself, and all such matters are then adjusted before the final blue prints are made. Bidders then never see such things as they now sometimes point out.

The object of bidding is to give the cost; the money-value in dollars and cents, not the quantity of materials and labor of all kinds. The owner should state what quantity of material, etc., it is that he requires. The only duty of the bidder is to use his judgment and put the cash value on such work as may be submitted to him. It is not his business to figure out quantities, he has neither the time nor the training, and, moreover, he is not paid to do this part of the work, any more than it is his business to figure floor loads or anything else of that nature.

It will be seen, therefore, that in the Quantity System there is a considerable saving of waste in bidders' time, and that the drawings and specifications are, after passing through the Quantity Surveyor's hands, as free from anything which might lead to controversy later, as it is possible to make them. This in itself will be found a great help in superintending construction, as many of those vexatious points which now necessarily arise will have already been settled before the contract was let.

Safer and closer bidding will result, with the assurance to the lowest bidder that he is "safe," so far as the quantities are concerned. The Bill of Quantities should, the writer believes, form the basis of the contract, and be one of the contract documents.

At present the owners naturally pay the contractors' overhead expenses which are increased unnecessarily under existing methods, and they could well afford to pay the Quantity Surveyor's fee of one per cent. or more, according to the type of building, and service involved, and still save money, owing to the clearness and advantages of this system. He takes no chances. Of course, it must not be expected to furnish a remedy for every evil in the business. It will not take the place of good material, or proper attention on the part of the contractor, nor will it help to keep crooks out of gaol, but it will establish an equitable basis for proper dealing between owner and contractor. There is no such efficient basis now, and if ever it was necessary it is at the present time.

(Continued on Page 315.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residences (19), Duncannon and E streets, Philadelphia, \$25,000. Architect, private plans. Owner, E. P. Stahl, 5200 North Third street, Philadelphia. Brick, 2 stories, 15x38 feet, slag roof, stone foundations, hot water heating, combination lighting, pine floors. Owner will build.

Factory, Eightieth and Bartram avenue, Philadelphia. Architect, Ames W. Barnes, Hermit and Righter streets, Roxborough. Owners, Richard L. Wallace Company, 120 Chestnut street, Philadelphia. Brick and reinforced concrete, 1 and 2 stories, 76x339 feet and 50x60 feet, slag roof, cement and maple oors, metal window guards, rolled steel sash, fire doors, ornamental iron work (heating, plumbing, lighting and elevator reserved). Architect taking bids due May 16th. Warren-Moore Co., Colonial Trust Building, A. R. Raff Construction Co., 1635 Thompson street, and F. A. Havens & Co., 845 North Nineteenth street; H. E. Baton, 1713 Sansom street, are figuring.

Power House and (2) Transformer Houses, Spec. 2952, Navy Yard, Philadelphia. Architect, private plans. Owner, United States Government, care C. W. Parks, Chief, Bureau of Yard and Docks, Navy Department, Washington, D. C. Brick, steel and reinforced concrete, 1 and 2 stories, 154x57 feet and (2) 30x16 feet, slate roof, electric lighting, rolled steel sash, fire and hollow metal doors, hollow tile, roof ventilators, waterproofing, wire work, ornamental iron work. Owners taking bids due May 20th. Warren-Moore Co., Colonial Trust Building; Thos. Reilly, 1616 W. Thompson street; Wark-Yardley Co., 1737 Filbert street; Wm. R. Dougherty, 1610 Sansom street, are figuring.

Store Building (alts.), 1654 Ridge avenue, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner, Leighton McMillin, 1652 Ridge avenue, Philadelphia. General interior alterations, brick work, hollow metal skylights, electric lighting, plumbing, cement floor in basement, maple and hardwood floors, mill work partitions, (1) elevator, stairways, flush bulk, ornamental iron work (lighting fixtures and steam heating reserved. Architects have received bids.

Residence (alts.), Thirteenth street near Oak Lane avenue, Oak Lane. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, name withheld. Stone, 2½ stories, bath room and porch addition, shingle roof, tile work. Plans completed. Architect has received bids.

Residence, Twelfth street above sixty-ninth avenue, Philadelphia. Owner, John H. Bothwell, 219 Tabor road, Olney, Philadelphia. Owner, Chas. Dapp, 6916 York road, Philadelphia. Brick and stucco, 3 stories, 46x35 feet, asphalt shingle roof, pine floors (heating, plumbing and lighting reserved), tile and marble work, hollow tile, metal lath. Architect taking bids due as soon as possible. Lam Building Co., 1001 Wood street, and W. G.

Isles, 806 Levick street, are figuring.

Store and Oil House and Office, Third and Erie avenue, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owner, Philadelphia and Reading Railroad Co., Twelfth and Market streets, Philadelphia. Reinforced concrete, brick and terra cotta coping, 1 and 2 stories, 60x83 and 20x44 feet, asbestos and slate roof, concrete, granolithic, pine and maple floors, steam heating, electric lighting, rolled steel sash, copper skylights, fire and all-metal doors, iron stairs, ornamental iron work. metal lath, elevators, wire work. Owners taking bids due May 20th. Wm. R. Dougherty, 1610 Sansom street, and Wark-Yardley Co., 1737 Filbert street; Thos. C. Trafford, 1613 Sansom street, additional bidders.

Service Building (alts.), southwest corner Twenty-third and Chestnut streets, Philadelphia. Architect, LeRoy B. Rothschild, Bulletin Building, Philadelphia. Owners, F. A. Roth Estate, Thirty-first and Jefferson streets, Philadelphia. Lessees, Internation Motor Co., on premises. Consists of general interior alterations, mezzanine floor, cement work. Architect taking bids due May 17th at 10 A. M. D. Henwood, 1509 Wood street, A. R. Raff Construction Co., 1635 Thompson street, Stacy Reeves & Sons, 2011 Market street, Lam Building Co., 1001 Wood street, and John N. Gill & Co., Otis Building, Philadelphia, are figuring.

Residence, Germantown, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth st., Philadelphia. Owner, Albert T. Baucier, Commonwealth Building, Philadelphia. Stone, 2½ stories, 35x40 feet, slate roof, hot water heating, hardwood floors, electric lighting. Architect taking bids due May 18th. Wm. J. Grubler & Co., 219 East High street, W. O. Springer, 1624 Latimer street, J. Sims Wilson Co., 1125 Brown street, and W. John Stevens, Inc., Wynette, Pa., are figuring.

Building, No. 25, Spec. 2976, Navy Yard, Philadelphia. Architect, private plans. Owners, United States Government, care R. O'Leary, Pay Inspector, Navy Yard, Philadelphia. Reinforced concrete and brick, second stor y addition, 162x59 feet, heating (electric lighting reserved), terrazzo work, fire doors, iron stairs, ornamental iron work, pine floors, electric elevator, safety treads. W. O. Springer, 1624 Latimer street, \$45,960, 120 days; Wark-Yardley Co., 1737 Filbert street, \$47,845, 90 days.

School (alt. and add.), Oak Lane, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Oak Lane Country Day School, Oak Lane, Philadelphia. Brick and stucco, 1 and 3 stories, 80x40 and 32x40 and 66x50 feet, slate and slag roof, cement and pine floors, metal lath, roof ventilators, stone foundations, tile work, fire escapes, ornamental iron work (heating and lighting reserved). Architects have received bids.

Building (alts.), 134 South Second street, Philadelphia. Architect, private plans. Owners, United States Government, Treasury Department, care Appraisers, Philadelphia. Brick, 6 stories, 100x150 feet, electric lighting, steam heating, mill work, stone work, painting, plumbing and glazing. Lowest bidders: F. A. Havens & Co., 845 North Nineteenth street, \$4,685, no time. W. O. Springer, 1624 Latimer street, \$4,923, 90 days. T. C. Trafford, 1613 Sansom street, \$5,550, 55 days. J. Sims Wilson Co., 1125 Brown street, \$5,301, 40 days.

School (alts. and add.), D and Indiana avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street, Philadelphia. Brick toilet addition, 1 story, plumbing, mill work. Lowest bidder, J. H. Jordan, Thirty-first and Oxford street, Philadelphia, \$1,835.

Girl's Southern High School, Broad and Snyder avenue, Philadelphia. Architect, J. Horace Cook, Nineteenth street above Chestnut, Philadelphia. Owners, Board of Education, Nineteenth street above Chestnut, Philadelphia. New wardrobe, cabinet work. Lowest bidders, Mitchell Bros., 2125 Race st., \$714.

Residences (76) Thirtieth and Tasker sts., Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, James MacBrine, care Scanlon Realty Co., Twenty-third and McKean streets, Philadelphia. Brick, 2 stories, 15x44 feet, slag roof, concrete and stone foundation, yellow pine floors, hot air heating, coal ranges, gas ranges, gas lighting, plumbing, cement work. Plans completed. Owner is ready for sub-bids on all lines.

Residences (18), Sixty-first and Columbia avenue, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Daniel E. Hogan, 6043 Columbia avenue, Philadelphia. Brick, 2 and 3 stories, 21x50 feet (garage in basements and rear), slag, slate and tin roofs, hot water heating, combination lighting, tile and marble work, metal lath. Plans completed. Owner is ready for sub-bids in all lines.

Station "D" (alt. and add.), Arch and Mascher street, Philadelphia. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Philadelphia Electric Company, 1000 Chestnut street, Philadelphia. Brick, steel and stone, 1 story, 20x44 feet, slag roof, stone foundations, cement floors, safety treads, roof ventilators (lighting reserved). Architect taking bids, due May 20th. Irvin & Leighton, 126 North Twelfth street; F. L. Hoover & Son, 1023 Cherry street; A. R. Raff Construction Company, 1635 Thompson street, John R. Wiggins & Co., Otis Building, and H. E. Baton, 1713 Sansom street, are figuring.

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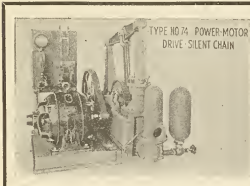
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Pennsylvania Building

Duct, Spec. 2965, Storage Buildings, Railroad Track and Pavements, Spec. 3010, Philadelphia, Pa. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Temporary Barracks, Frankford Arsenal, Philadelphia. Architect, Edwin J. Bewter, Frankford Arsenal, Philadelphia. Owner, U. S. Government, care Col. Samuel Hof, Frankford Arsenal, Philadelphia. Frame 3 stories, 40x100 feet, ready roof, concrete and pine floors, steam heating, electric lighting, waterproofing. Owners taking bids due May 16th. Thos. C. Traford, 1613 Sansom street, Wm. R. Dougherty, 1610 Sansom street, John R. Wiegins Co., Otis Building, Wills-Ludwick Co., 34 South Seventeenth street, Ketcham & McQuade, 1029 Brown street. J. Sims Wilson Co., 1125 Brown street is figuring.

Factory, Seventh and Wood streets, Philadelphia. Architect, H. H. Hokanson, 1713 Sansom street, Philadelphia. Owner, Chas. W. Lawser, 623 Wood street, Philadelphia. Brick and tile, 2 stories and basement, 90x51 feet, slag roof, cement floors, rolled steel and hollow metal sash and skylights, fire doors, roof ventilators. Owner taking bids due as soon as possible. Wark-Yardley Co., 1737 Filbert street, additional bidders.

Rectory (add.), Seventeenth and Ritner sts., Philadelphia. Architects, Hemon & Boyle, 10 South Eighteenth street, Philadelphia. Owner, St. Monica R. C. Church, care of Rev. John J. Walsh, on premises. Brick, 2 stories, 18x40 feet, additional, slag roof, steam heating and electric lighting extension, plumbing, tile and marble work. Plans about completed. Architect will take bids in a few days.

Recreation Park, Fifty-seventh and Haverford avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owner, City of Philadelphia, Board of Recreation, 587 City Hall. Cement coping, iron fence and gates, wire screen, brick work, blue stone curb (plumbing separate bids). Architect taking revised bids due May 17th at noon.

Theatre (alts.), Broad and Snyder avenue, Philadelphia. Architect, The Hoffman Co., Finance Building, Philadelphia. Owners, Broadway Theatre Co., on premises. New Marquis, pipe ducts under floors and cement

floors. Architect taking bids due May 18th. Ketcham & McQuade, 1029 Brown street, and P. M. Sax, Franklin Bank Building, are figuring.

Residence, Germantown, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, Albert T. Bauerle, Commonwealth Building, Philadelphia. Stone, 2½ stories, 35x40 feet, slate roof, hot water heating, hardwood floors, electric lighting. Architect taking bids due May 22d. (Note change in date). Wm. J. Gruhler & Co., 219 East High street, W. O. Springer, 1624 Latimer street, J. Sims Wilson Co., 1125 Brown street, and W. John Stevens, Inc., Wynecote, Pa. are figuring.

Police Station (Fire repairs), York Road & Champlott street. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owner, City of Philadelphia, Department of Public Safety, City

Hall. Consists of fire repairs. Owners taking bids due May 17th. F. A. Havens & Co., 845 North 19th street, Mitchell Bros., 2125 Race street, E. C. Durell, 1713 North 24th street, and Geo. Dobbins, 42nd & Chester avenue are figuring.

Recreation Park, Front and Allen streets, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owner, City of Philadelphia, Board of Recreation, 587 City Hall. Demolition, grading, iron fences and gates, cement coping, plumbing. Architects taking bids, due May 21st at noon.

Hospital (alts.), Thirty-third and Lancaster avenue, Philadelphia. Architects, Brookie & Hastings, 1713 Sansom street, Philadelphia. Owner, Rush Hospital, on premises. General interior alterations, plastering, carpentry, tile work. Architect has received bids.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Power House and Coal Pocket, Tulip and Somerset streets, \$30,000. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railroad Co., Twelfth and Market streets, Philadelphia. Brick, reinforced concrete and terra cotta, 1 story and basement, 48x77 and 42x22 feet, asbestos roof, cement and brick floors, rolled steel sash, hollow metal doors, iron stairs, roof ventilators, waterproofing, ornamental iron work. Contract awarded to Pringle Borthwick, 8018 Germantown avenue, Philadelphia.

Factory, Erie avenue east of Richmond st., Philadelphia, \$60,000. Architect, Frederick Webber, Morris Building, Philadelphia. Owner, name withheld. Brick, 2 stories, 84x99 feet, slow burning construction, slag roof, yellow pine floors, steam heating, electric lighting. Contract awarded to Standard Construction Co., 1713 Sansom street, Philadelphia.

Temporary Storage Buildings "A and E" and Railroad Track, Navy Yard, Philadelphia,

\$47,470. Owners, United States Government, care De Witt Webb, Public Works, Washington, D. C. Frame, Building "A" No. 2641, 1 story, 200x100 feet; Building "E," No. 2640, 1 story, 80x60 feet, 4500 feet track and 1800 square yards of concrete, ready roof, cement floors, roof ventilators. Contract awarded to Edw. Fay & Son, 2 South Mole street, Philadelphia.

Naval Training Camp Extension, No. 2024, League Island, Philadelphia, \$13,000. Architect, private plans. Owners, United States Government, Bureau of Yards and Docks, care C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 1 and 2 stories, 33 buildings, various sizes, 3-ply ready roofs, yellow pine floors, steam heating, electric lighting, plumbing, painting, plastering, glazing, hardware, ornamental iron work. Contract awarded to Wm. Linker Co., 831 Cherry street, Philadelphia.

Residences (19), Gross and Arch streets, Philadelphia, \$76,200. Architect, Bart Tourison, Land Title Building, Philadelphia. Owner,

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John L. Sanders, 848 Land Title Building, Philadelphia. Brick, 2 stories, 16x38 feet, slag roof, stone foundations, hot water heating, combination lighting, pine floors. Contract awarded to John H. McClatchey, Land Title Building, Philadelphia.

Garage, Twenty-first and Glenwood avenue, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, R. A. and J. J. Williams, Twenty-second and York streets, Philadelphia. Brick, 1 story, 23x100 feet, slag roof, stone foundations, hot water heating, electric lighting, cement floors, hollow metal sash and skylights (gasoline storage system reserved). Contract awarded to H. E. Grau Co., 1707 Sansom street, Philadelphia.

Nurses Quarters (add.), Spec. 2946, Philadelphia. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 and 5 stories, 20x50 feet, (2) 20x20 feet, 20x155 feet, 23x56 feet, and 18x20 feet, steam heating, ready roof, electric lighting, waterproofing, cement floors. Contract awarded to Thos. C. Trafford, 1613 Sansom street, Philadelphia. Items, Nos. 1, 6, 7 and 8. Total, \$55,000.

Restaurant, southeast corner Juniper and Cherry streets, Philadelphia, \$6,500. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, J. Walter Rosenberg, 151 South Broad street, Philadelphia. Brick, 1 story, 30x60 feet, slag roof, pine floors, stone foundations, electric lighting (heating reserved). Contract awarded to Albert Zellfelder, 151 South Broad street, Philadelphia.

Residence (alt.), Ardmore, Pa., \$1000. Architects, McVaine & Roberts, Otis Building,

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Philadelphia. Owner, Col. Henry D. Hughes, Ardmore, Pa. Plumbing, electrical work, plastering, interior partitions. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Workingmen's House (960), Philadelphia. Architect, Private plans. Owners, Emergency Fleet Corp., 136 South Sixteenth street, Philadelphia. Brick, 2 stories and basement, 16x30 feet, slag roof, cement and pine floors, hot air and steam heating, electric lighting, damp-proofing, ornamental iron work. Contract for \$10 at 61st, 62nd, Elmwood and Gibson ave., awarded to H. P. Schneider, 3713 Old York Road. Price \$2,897, 100 houses to be completed in 90 days. Contract for 550 at 67th and Elmwood avenue, awarded to Moss-Taylor & Crawford, 58th and Girard avenue. Price, \$2,897, 100 houses to be completed in 90 days.

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ington, D. C.

PENNSYLVANIA Construction News

Locomotive House and Vehicle House, Spec. 2999, and Ammunition Filling Houses (2), Fort Mifflin, Pa. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Moving Picture Theatre, Clifton Heights, Pa. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, John J. Dougherty and Arthur P. Blake, Sixty-ninth and Market streets, Upper Darby township, Pa. Brick and stone, Plans in progress. Too early for details.

Residence (alt. and add.), Sharon Hill, Pa. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, name withheld. Brick, 1 story, addition 50x20 feet, slate roof, terrazzo and tile floors, stone foundations, hot water heating, electric lighting, tile and terrazzo work. Architect taking bids due as soon as possible. John Duncan Co., 920 Walnut street is figuring. (Only bidder.)

Residences (108), Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Chester Realty Co., Chester, Pa. Brick, 2 stories, 16x33 and 18x29 feet, slag roof, yellow pine floors, stone founda-

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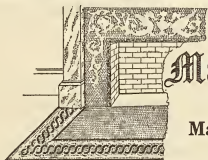
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tions, hot water heating, combination lighting. Work has been started.

Garage, Clifton Heights, Pa. Architect, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, Alfred Botfield, care architects. Brick, 1 story, 40x120 feet, slag roof, electric lighting. Plans completed. Architects will be ready for bids in ten days.

Residence, Wyomissing, Reading, Pa. Architect, L. D. Lance, Reading, Pa. Owner, G. F. Lance, Jr., Reading, Pa. Brick, 2 stories, 36x28 feet, slate roof, hot water heating, electric lighting, hardwood and pine floors. Plans in progress.

Store Building (alt. and add.), Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owners, Lord & Gage, care Mrs. Miller, Reading, Pa. Brick, 5 stories, steam heating, electric lighting, hardwood floors, plumbing, elevators. Plans in progress.

Fire House, Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owners, City of Reading, care Peter Hull, Department of Public Safety, City Hall, Reading, Pa. Brick, 2 stories, 32x57 feet, tin roof, cement floors (steam heating, electric lighting and plumbing reserved). Plans in progress.

Apartment House, Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owner, John Grill, Reading, Pa. Brick, 2 and 3 stories, steam heating, electric lighting. Preliminary plans completed.

Town Hall, Robeson, Pa., \$25,000. Architect, C. J. Young, Reading, Pa. Owner, Pioneer Hose Co., Robeson, Pa. Brick, 2 stories, 60x140 feet, slag roof, vapor heating, electric lighting. Owners taking bids. John Hollenback, Robeson, Pa., is figuring.

Swimming Pool, Chaddsford, Pa. Architects, De Armond, Ashmead & Bickley, 20 South Fifteenth street, Philadelphia. Owner, C. B. Holliday, Chaddsford, Pa. Reinforced concrete and tile, 25x60x10 feet. Architect will take sub-bids.

Residences (8), Ardmore, Pa. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owner, H. O. Kcener, 3015 Chestnut street, Philadelphia. Brick, 2 stories, slag roof, also moving four old houses to site of new ones. Plans in progress.

Store, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Penn Realty Co., Chester, Pa. Brick, 1 story and basement, 18x80 feet, slag roof, N. C. yellow pine floors, hot water heating, electric lighting, flush bulks. Plans in progress. Owners will be ready for bids in a week.

Auto Show Rooms, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Penn Realty Co., Chester, Pa. Brick, stone and terra cotta, 1 story and balcony, 36x84 feet, slag roof, hot water heating, electric lighting, tile work, hardwood floors, metal bulks. Plans in progress. Owners will be ready for bids in a week.

Residence (alts.), Green Hill, Chester Co., Pa. Architect, private plans. Owner, Bradford M. Couch, Morris Building, Philadelphia. Frame and stucco, 2½ stories, 40x60 feet, new vacuum heating plant. Owner is ready for bids.

Nurses Home, Phillipsburg, Centre Co., Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, Phillipsburg Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, lighting and plumbing separate bids). Architects taking new bids due May 17th. Pomeroy Construction Co., 1609 Ranstead street, and Hogg Construction Co., 1634 Sansom street; Lewis D. Steinbach & Son, Lewistown, Pa., are figuring.

Barn and Wagon House, near West Chester, Pa. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, name withheld. Stone, 2 stories, 35x80 feet, slate roof, cement floors. Plans in progress.

Bridge, over Susquehanna River, P. & R. RR., Hamburg, Penna. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia. Concrete, stone and steel. Plans about completed. Work contemplated.

Housing Project, Chester, Penna., \$2,000,000. Architect, G. Edwin Brumbaugh & Simon & Assett, 249 South Juniper street, Philadelphia. Owner, Chester Ship Building Co., Ches-

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Apartment House (alts.), 208 Penn street, Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Mrs. Lillie Specht, Reading, Pa. Brick, 2½ stories, carpenter work, plastering, yellow pine floors, vapor heating, electric lighting. Plans in progress.

Apartment House (alt.), 111 South Sixth street, Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Mrs. Lillie Specht, Reading, Pa. Brick, 3 stories, carpentry, plastering, yellow pine floors, vapor heating, electric lighting. Plans in progress.

Pennsylvania Contracts Awarded

Residence (alts.), Lansdowne, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner, Moritz Leefson, 11 Owen avenue, Lansdowne, Pa. Brick, 2½ stories, general interior alterations, hardwood floors. Contract awarded to J. H. Roberts, Lansdowne, Pa.

Service Station, Wyoming and New streets, Scranton, Pa. Architects, The W. G. Wilkins Co., Westinghouse Building, Pittsburgh, Pa. Owners, The Atlantic Refining Co., 3144 Passunk avenue, Philadelphia. Brick, stone and terra cotta, 1 story, 30x15 feet, wall 116x75 feet, steel roof, cement and tile floors, steam heating, electric lighting, tile and marble work, hollow metal skylights, metal lath, safety treads, metal window guards, waterproofing. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Cottages (2), Glen Loch, Pa. Architects, Zantinger, Borie & Medary, Otis Building, Philadelphia. Owners, Church Farm School, Glen Loch, Pa. Stone, 2 stories, shingle roof, hot air heating, electric lighting, yellow pine floors. Contract awarded to Walter H. Palmer, Frazer, Pa.

High School (interior Work), Lebanon, Pa. Architect, A. A. Ritcher, Reading, Pa. Owner, School Board of Lebanon, care E. H. Conley, Secretary, Lebanon, Pa. Painting, metal lath, hardware, yellow pine floors. Contract awarded to Beard Construction Co., Reading, Pa.

Building, No. 37, Reading, Pa. Architects, Muhlenberg Bros., Reading, Pa. Owners, Carpenter Steel Works, Reading, Pa. Brick and steel, 1 story, 146x135 feet, Carey roof, con-

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crete floors, hollow metal sash and skylights. Contract awarded to Daniel H. Hunter, Reading, Pa.

School, East Fallowfield, Chester Co., Pa., \$43,000. Architect, M. I. Kast, 222 Market st., Harrisburg, Pa. Owner, Board of Education, care of E. C. Phillips, Secretary, Coatesville, Pa. Brick, 1 story and basement, 69x101 feet, composition roof, pine floors, steam heating or hot air heating, electric lighting, hollow tile, roof ventilators. Contract awarded to W. J. Elliott, Coatesville, Pa.



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NEW JERSEY Construction News

Ice Box, Camden, N. J. Engineer, W. W. Hibbert, Penfield Building, Philadelphia. Owners, Campbell Soup Co., Camden, N. J. Steel and cork, 42x167x10 feet, cement floor, tile work. Engineer is taking sub-bids.

Factory Building, Hoboken, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Chocolat-Menier, Hoboken, N. J. Brick, steel and concrete. Architects taking bids due May 22d at noon. American Concrete Steel Co., Newark, N. J., Chas. R. Headen Co., Newark, N. J., DeKimppe Construction Co., Union Hill, N. J., Amsterdam Building Co., 140 West Forty-second street, Caspar Ranger Construction Co., 101 Park avenue, White Fireproof Construction Co., 286 Fifth avenue, Chas. Cowen Co., 30 East Forty-second street, Ruggles Robinson Co., 331 Madison avenue, Zimmerman Sons, Inc., 103 East Ninety-second street, Cramp & Co., 25 East Twenty-sixth street, Levering & Garrigues, 352 W. Twenty-third street, John Hegeman & Co., 33 West Forty-second street, Longacre Construction Co., 11 East Forty-second street, and Isaac Hoppe's Sons, 15 East Fortieth street, all of New York City, are figuring.

Magazine Buildings (10), Spec. 2927, Lake Denmark, N. J. Architect, private plans. Owners, United States Government, care C.

W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Air Station, Storehouse, Shops and Magazine Building, Cape May, N. J. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Rowing, Spec. 2995, Cape May, N. J., Foundation for Gas Holders, Spec. 3003, Cape May, N. J. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Residence (alt. and add.), Lawrenceville, N. J. Architect, Wm. Klonman, First National Bank Building, Trenton, N. J. Owner, Dr. Russell, Lawrenceville, N. J. Frame, 2½ stories, tin roof, electric lighting, pine floors. Plans in progress. Too early for details.

School, Juliustown, Burlington Co., N. J., \$7,000. Architect, Harry Hill, Trenton, N. J. Owner, School Board of Juliustown Tp., care of Frank Bosarth, Clerk, R.F.D., Burlington, N. J. Frame, 1 story, 75x40 feet, pine floors. Plans completed. Owners ready for bids.

NEW JERSEY Contracts Awarded

Signal Tower, Oil House and Septic Tank, White House, Redington Township, Hunterdon Co., N. J. Architect, private plans. Owner, Central Railroad of New Jersey, care Chief Engineer of Central Railroad of New Jersey, 143 Liberty street, New York City. Brick, 2 stories. Contract awarded to Beard Construction Co., Reading, Pa.

Storehouses (30), No. 2884, Lake Denmark, N. J., \$582,250. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, hollow tile and steel, 1 and 2 stories, 200x60

feet, slag roof, pine floors, hollow tile, rolled steel sash, fire doors, roof ventilators, damp-proofing, wire work (heating and lighting reserved). Contract awarded to the Austin Co., Bulletin Building, Philadelphia, time 40 days.

Hospital, Laundry Building, and Boiler House, Trenton, N. J. Architect, Wm. A. Klonman, Trenton, N. J. Owner, City of Trenton, Department of Public Affairs, care of Mayor Donnelly, Trenton, N. J. Brick, 1 and 2 stories, 300x26 feet, and 50x86 feet, slate roof, concrete floors, hollow tile, metal lath, elevators, safety treads, steam heating, elec-

tric lighting, tile and marble work, iron stairs. Contract awarded for carpentry to Fred Parker, Trenton, N. J. Contract for masonry awarded to Chas. Smith, Trenton, N. J.

Miscellaneous Construction News

Store and Office (alt.), 716 Market street, Wilmington, Del. Owner, Hurley Powell Co., on premises. Architect, John D. Thompson, Ford Building, Wilmington, Del. Brick, 3 stories, 20x100 feet, carpentry, plastering, maple floors, electric lighting. Plans about completed. Architect will take bids in a few days.

Parish House, Norfolk, Va. Architect, Frank R. Watson, 1211 Walnut street, Philadelphia. Owners, Christ Church, care Rev. Francis C. Steinmetz, S. T. D., Norfolk, Va. Indiana limestone and cut stone trimming, 2 stories and basement, 50x80 feet, slate roof, steam heating, electric lighting, Port Deposit granite, tile work. Owner and architect are sub-letting contracts.

Residence, Laurel, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Sirman D. Marvil, Laurel, Del. Frame, 2½ stories, 30x45 feet, shingle roof, hardwood floors, vapor heating, electric lighting. Plans about completed. Architect will take bids in a few days.

Residence, Seventh and Rodney streets, Wilmington, Del. Architects, Brown & White-side, Dupont Building, Wilmington, Del. Owner, John Hare, Jr., Wilmington, Del. Brick, 2 stories, shingle roof, hardwood floors, electric lighting. Architect has received bids.

Quarantine Station, Reedy Island, Del. Architect, private plans. Owners, United States Government, care Jas. A. Wetmore, Washington, D. C. Reinforced concrete, brick and frame. Laundry, 1 story, 61x121 feet, Attendants' Quarters, 1 story, 70x28 feet, Officers' Quarters, 1 story, 42x50 feet, Barracks, 1 story, 81x28 feet, tin, shingle and prepared roof, pine floors, tile and marble work, metal lath, safety treads, iron stars, ornamental iron work (heating and reserved). Owners taking bids, due May 27th at 3 P. M. F. L. Hoover & Sons, 1023 Cherry street; W. W. Anstine & Co., 1218 Filbert street; Frank G. Stewart, 1619 Sansom street; Wills-Ludwick Co., 34 South Seventeenth street; Wark-Yardley Co., 1737 Filbert street, Philadelphia, are figuring.

Residence (alt.), 819 Washington street, Wilmington, Del., \$5,000. Architect, J. J.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Kennedy, Ford Building, Wilmington, Del. Owner, John Govatos, on premises. Brick, 3 stories, slate roof, vapor heating, electric lighting, hardwood floors. Plans in progress.

Stable and Sheds, Wilmington, Del. Architect, John D. Thompson, Ford Building, Wilmington, Del. Owner, Hamilton Coal Co. Tenth and Church streets, Wilmington, Del. Brick, 1 and 2 stories, composition roof, concrete and pine floors. Revised plans about completed. Architect will take bids in a few days.

MARYLAND Construction News

School, Galena, Md. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, School Board, Galena, Md. Frame, 2 stories, 60x30 feet, shingle roof, pine floors (heating, lighting and plumbing reserved). Owners will advertise for new bids due May 29th. Walter Pippin, and A. N. and A. S. Culp, Chestertown, Md., will figure.

Laboratory, Monument street and Rutland avenue, Baltimore, Md., \$200,000. Architects, Archer & Allen, No. 1 E. Lexington street, Baltimore, Md. Owner, Johns Hopkins Hospital, care of Dr. Frank Goodnow, Preest., on premises. Brick and stone, 3 stories, slate

Naval Training School Extension, Spec. No. 2925, Hampton Roads, Va. Architect, Private plans. Owners United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story, Barracks, 128x27 feet, Latrine, 94x24 feet, Mess Hall, 252x62 feet, Kitchen, 118x40 feet, Dispensary, 90x123 feet, Concrete Scrub Room 40x24 feet, Isolation Ward, ready roofs, steam heating, electric lighting, cement and wood floors, plumbing, painting, glazing. Contract awarded to King Lumber Co., Charlottesville, Va.

and slag roof, steam heating, electric lighting, tile and marble work, ornamental iron work, plumbing, elevators. Plans about completed. Will be ready for bids in one week.

Psychopathic Building (equipment), Spring Ave., Catonsville, Md. Architects, Baldwin & Pennington, 330 North Charles street, Baltimore, Md. Owner, Spring Grove State Hospital, care of Dr. Percy Wade, Superintendent, on premises. Owners are ready for bids on electric lighting, steam heating, plumbing, tile and terrazzo work, dumbwaiters, plastering and painting.

MARYLAND Contracts Awarded

Maryland Institute (alts.), Baltimore, Md., \$1,550. Architect, private plans. Owners, City of Baltimore, care of C. H. Osborne, Inspector of Buildings, City Hall, Baltimore, Md. Brick work, fire doors, metal sash, plumbing. Contract awarded to W. A. Parr, 1621 East North avenue, Baltimore, Md.

Factory, Adamstown, Md. Architect, private plans. Owners, Adams Canning Co., Adamstown, Md. Reinforced concrete, 2 stories,

slag roof, steam heating, electric lighting, hollow metal skylights, roof ventilators, tile work, plumbing, refrigerators. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore, Md.

Garage, Hudson and Belnord streets, Baltimore, Md., \$3,500. Architect, private plans. Owner, John L. Bielak, 900 South Binney st., Baltimore, Md. Brick, 1 story, 80x65 feet, slag roof, cement floor. Owner is sub-letting.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Factory, Nineteenth and Allegheny avenue, \$10,000. Electric Storage and Battery Co. (O), on premises. Wm. Steel & Sons Co. (C), 30 South Fifteenth street. Brick, 2 stories, 15x37 feet, slag roof.

Carpenter and Repair Shop, Penrose Ferry Road and Fort Mifflin Road, \$28,000. Philadelphia Railway Co. (O), Philadelphia. Wm. Steel & Sons Co. (C), 30 South Fifteenth street. Brick, 1 story, 78x70 feet and 35x116 feet, and 42x42 feet, slag roof.

Dwellings (19), Gross and Arch streets, \$76,200. John L. Sanders (O), 848 Land Title Building. John H. McClatchy (C), 848 Land Title Building. Brick, 2 stories, 16x38 feet, slag roof, hot water heating, stone foundations.

Dwellings (30), Fifty-third street, Florence

and Warrington avenue, \$96,600. Ferguson & McDowell (O and C), 1003 North Fifty-first street. Stone and brick, 2 stories, 15x42 feet, slag roofs, hot water heating, stone foundations.

Oil and Pump House, Milnor and Bleigh streets, \$1,885. Tacony Ordnance (O), Tacony. M. Moistor Co. (C), 3931 North Fifth street. Iron on iron, 1 story, 17x23 feet and 18x27 feet.

Garage, 4116 Ogden street, \$1,470. N. M. King (O), on premises. M. Moistor Co. (C), 3931 North Fifth street. Iron on iron, 1 story, 27x56 feet.

Garage, Sixty-fourth and Church Road, \$5,000. Morris Estate (O), Overbrook. Alfred James (C), Bala. Brick, 2 stories, 23x23 feet, slate roof, metal lath, stone foundations.

Factory, Tulip and Erie avenue, \$6,000. Reid Metal Refining Co. (O), Tioga and Tulip streets. Barnes Bros. (C), 2080 East Willard street. Brick, 48x99 feet, slag roof, 1 story.

Garage and Shop, 1641-43 North Broad st., \$12,000. Kahn & Greenberg (O and C), 309 Morris Building. Brick, 2 stories, 64x165 feet, slag roof, steam heat.

Garage, Mitchell and Seville streets, \$450. Ernest Kittenger (O), on premises. Friend Seagill (C), Price and Rockland streets. Stone, 1 story, 14x20 feet, slag roof.

Dwellings (9), Duncannon and E streets, \$25,000. E. P. Stahl (O and C), 5200 North Third street. Brick, 2 stories, 15x35 feet, slag roof, hot water heating.

Dwellings (16), Sixth and Chew avenue, \$65,000. J. M. Faust (O and C), 4611 North Broad street. Stone, 2 stories, 15x44 feet, slag roof, hot water heating, stone foundations.

Alterations and Additions

Store and Dwelling, 642 Snyder avenue, \$2,200. D. Slutsky (O), 2035 South Seventh street. J. Yudofsky (C), 2032 South Eighth street. Brick, 2 stories, 12x14 feet, slag roof, and alterations.

Store, 802 Walnut street, \$400. Mercers & Brown (O), 202 South Fifteenth street. W. Ferguson & Son (C), 405 South Twenty-first street. Repair second floor. Tenement and Office, Park and Montgomery avenue, \$1,800. C. F. Chandler (O), on premises. Harry P. Werner & Co. (C), 3243 Germantown avenue. Brick, 1 story 20x20 feet, slag roof.

Church, Palmetto and Cottman streets, \$1,200. Emanuel Lutheran Church (O), on premises. Congregation (C), on premises. Frame, 1 story, 24x48 feet, shingle roof.

Boiler Room, 6040 Umbria street, \$300. Keystone Boiler Works (O), on premises. Friend Seagill (C), Rockland and Price streets. Stone, 1 story, 9x12 feet, slag roof.

Warehouse, 511 Commerce street, \$5,000. Supplee Biddle Hardware Co. (O), on premises. H. H. Burrell (C), 206 South Quince street. Front 1 story, terra cotta and new iron and marble stairway.

Stack, Orianna and Cumberland streets, \$1,000. Wm. Ayers & Son (O), on premises. Coatesville Boiler Works (C), 809 Morris Building. Steel stack, 36 inches diameter, 71 feet high.

Shop, 1210 South Nineteenth street, \$500. Israel Berkman (O), 1212 South Nineteenth street. H. F. Kinkelbaker (C), 227 North Parson street. Alterations.

Garage, Delaware and Wolf streets, \$500. Hamilton Cooperage (O), on premises. R. Atkinson (C), 24 South Seventh street. Alterations.

Dwelling, 1517 Spruce street, \$850. Mary E. Fitzpatrick (O), on premises. P. B. Davis (C), 240 N. 16th street. Skylight in roof alterations only.

Storage Shed, 229 Ripka street, \$1200. Martin Atkinson (O), 223 Ripka street. C. M. Swartz (C), 6835 Ridge avenue. Alterations to walls from frame to stone.

Store and Office, 1318 Chestnut st., \$815. Linnard Est (O), 710 Commercial Trust Bldg. Morris Daniels (C), 252 S. Juniper st. Repair floor construction.

Garage, Pulaski avenue and Rittenhouse st., \$4000. Atlantic Refining Co. (O), 3144 Passayunk avenue. Metzger & Fisher (C), Otis Bldg. Interior alterations.

Boiler Room, Front & Dauphin sts., \$1000.

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.**

John Bromley & Sons (O), Lehigh avenue & "O" street. G. W. Stewart (C), 2133 Germantown avenue. Alterations.

Dwelling, 204 N. 61st street, \$350. Wm. Hamilton (O), on premises. Wm. N. Thompson (C), 1529 Filbert street. Frame shed, 6x6 feet, tin roof.

Garage, Salmon & Cambria streets, \$2500. John McAber (O), 2914 Richmond street. Ed. F. Judge (C), 2914 Richmond street. Brick, 1 story, 20x60 feet, slag roof.

Dwelling, 7915 Crefeld street, \$500. Dr. Geo. Woodward (O), 709 N. American street. John E. Walt (O), 204 E. Willow Grove avenue. Alterations to roof.

Dwelling, 218 Benezet street, \$500. Peter McDevitt (O), on premises. John E. Walt (C), 204 E. Willow Grove avenue. Bath room and alterations.

Garage, 4719 Dunfield street, \$600. Alfred R. Swope, (O and C), 1604 Margaret street. Brick, 1 story, 17x54 feet, slag roof.

Garage, 826 S. Front street (rear), \$350. Michael Rogulski (O), on premises. Angelo Codomo (C), 2026 South Eighth street. Brick, 1 story, 14x14 feet, slag roof.

Factory, Broad and Wallace streets, \$1000. Kahn & Greenberg (C), 309 Morris Bldg. Alterations and fire proof partitions.

Foundry, 18th and Allegheny ave., \$23000. Cresson Morris Co., Inc. (O), on premises. Raith Const. Co. (C), 302 W. Master street. Brick, lumber and steel, alterations, brick, 1 story addition, 50x200 feet, slag roof.

Garage, 2222 N. 26th street, \$1000. J. A. Schappert (O), 2218 N. 26th street. Levi Ellis (C), 2336 N. Fifth street. Brick, 1 story, 29x32 feet, slag roof and alterations.

Dwelling, 229 N. 18th street, \$345. Elizabeth Steele (O), 535 Chestnut street. Flood & Quinn (C), 16th and Cherry streets. Interior alterations.

Garage, 116-18-20 N. 13th street, \$2500. Jesse Jay Schanery (O), Empire Building. Albert Zellfelder (C), 151 S. Broad street. Interior alterations, heating plant and cement floor.

Wholesale Duck and Equipment, 1021-23 Callowhill street, \$1000. R. A. Humphreys Sons (O), on premises. C. Edwin Wolfe (C), 1011 Ridge avenue. Build signs on roof 9x144 feet.

Dwelling, 1104 N. 41st street, \$800. Mrs. Alice McCrea (O), on premises. Mr. L. Ritz (C), 34 South 2nd street. Hot water heating installed.

Store and Dwelling, 1159 South 12th street, \$400. D. Luango (O), on premises. Pasquali Campora (C), 1540 Dickinson street. Brick walls second and third floors.

Dwelling, 716 Pine street, \$1000. Rabbi Levantail (O), on premises. L. Swerdloff (C), 228 South 59th street. Brick, 2nd story addition, 16x12 feet, and alterations.

Shop, 1220 Beach street, \$1500. Fred Craemer (O and C), on premises. Brick, 1 story, 37x53 feet, slag roof.

Woman's Retreat, Bleigh and Milnor streets, \$4700. Tacony Ordnance Co. (O and C), on premises. Brick 1 story, 27x37 feet, slag roof.

Bake House, Franklin and Cayuga streets, \$350. W. Fischer (O and C), 3021 N. 5th street. Brick, 1 story, 8x18 feet, slag roof.

Dwelling, 1204 City Line, \$1800. H. J. Johnson (O), 1308 Walnut street. M. Marks (C), 508 Bailey Bldg. Brick, 2 stories, 30x20 feet, slag roof.

Office and Factory, Richmond & Tioga sts., \$1500. Girard Smelting and Refining Co. (O), on premises. Karl Krow (C), on premises. Brick, 1 story, 18x25 feet, and 1 story, 21x28 feet, slag roof.

Store and Dwelling, 3340 Germantown ave., \$300. Walter S. Trainer (O), 3319 N. 12th street. John Schuster (C), 3552 North 15th street. Brick, 1 story, 12x16 feet, tin roof.

Store and Dwelling, 5028 Germantown ave., \$1250. Alice Doskfsky (O), 5026 Germantown avenue. Philip Goodman (C), 2540 So. Third street. Brick, 1 story, 14x25 feet, second story, 14x14 feet, tin roof.

Dye Works, Witter and Clearfield streets, \$2200. Phenix Dye Works (O), on premises. J. G. T. Nulter (C), 2315 W. Clearfield street. Brick, 1 story, 32x36 feet, slag roof.

War Relief Work, 8419 Germantown avenue, \$2500. Mrs. Geo. Woodward (O), St. Martin's, Philadelphia. Stokes Brothers (C), 6723 Musgrove street. Temporary porch, 40x18 feet, stone.

Store and Dwelling, 678 North 13th street, \$1600. A. Gleder (O), 670 North 13th street. M. J. Benamy (C), 3042 W. York street. Flush bulk and alterations.

Store and Dwelling, Fourth and Bainbridge streets, \$1500. Harry Faden (O), on premises. Mich. Kirshner (C), 421 Snyder avenue. New bulk and alterations.

Garage, 6412 North Twenty-first street, \$500. C. Flood (O), on premises. Frank K. Stahl (C), 2713 North Park avenue. Brick, 1 story, 19x20 feet, slag roof.

Store, 1027 Market street, \$1775. E. Schwehm (O), 15 East Wister street. Lam Building Co. (C), 1001 Wood street. Tank support 1-10,000 gallon tank, 1-1000 gallon tank.

Store, 214-16 Arch street, \$1000. E. Schwehm (O), 15 East Wister street. Lam Building Co. (C), 1001 Wood street. Alterations.

Office, Bath and Ontario streets, \$4500. Berg Co. (O), on premises. Joe Levin (C), (O), 1530 South Fifth street. Brick, 1 story, 42x32 feet, slag roof.

Dwelling, 437 North Fifty-second street, \$500. Louis Kalis (O), 445 North Fifty-second street. M. Miron (C), 835 North Fifth street. Brick, 1 story, 16x10 feet, slag roof.

Dwelling, 404 South Fifth street, \$400. M. Mahner (O), 818 South Fifth street. M. Miron (C), 835 North Fifth street. Interior alterations.

Dwelling, 2012 South Twelfth street, \$600. Domenick Distefena (O), on premises. Alfonso Pile (O), 1209 South Thirteenth street. Brick, 1 story, 11x18, slag roof.

Store, Tenth and Annin streets, \$1000. Joe Pollino (O), 1167 South Tenth street. M. Cipriano (C), 1134 Watkins street. Flush bulk and alterations.

Rooming House, 251-53-55 South Eighth st., \$1675. Runtig & Shrigley (O), 603 Chestnut street. Brownworth & Co. (C), 1611 Sansom street. Iron fire escape.

Store, 2627 Germantown avenue, \$600. Chas. Berzer (O), Brooklyn, N. Y. H. H. Wellmeier (C), 509 West Cumberland street. Fire repairs.

Factory, Nineteenth and Allegheny avenue, \$3500. Electric storage and Battery Co. (O), on premises. Wm. Steele & Son Co. (C), 30 South 15th street. Brick, 2 stories, 14x18, and 1 story 35x18, slag roof and alterations.

Dwelling, 5231 Greene street, \$700. C. V. Jackson (O and C), on premises. New porch and alterations.

Dwelling, Eighteenth and Wallace streets, \$520. M. J. Coughlan (O), on premises. M. H. Brown (C), 2718 North Twenty-eighth st. Brick 1 story, 16x15 feet, slag roof.

Furnace House, Huntingdon and Aramingo streets, \$15,000. John T. Lewis & Bros. Co. (O), 2545 Aramingo street. Walter F. Einwechter (C), 314 Richmond street. Concrete foundation for 18 furnaces.

(Continued from Page 308.)

Upon the establishment of the Quantity System, interpretations of contract documents after a contract is signed, will be a thing of the past, the necessity for them will be discovered by the Quantity Surveyor when he is preparing the Quantities, misunderstandings, alleged or otherwise, will be reduced to a minimum. Contractors will have no disputes with their sub-bidders as to what they include in their figure, the Quantities will show exactly. Contractors not having to spend half their time in figuring, will then have time to attend to their buildings in progress, and incidentally to supervise the work of their sub-contractors. Architects need no longer be under obligations to contractors for preliminary estimates. Such matters would be dealt with equally as well or better by the Quantity Surveyor. No change or reorganization of the architect's office is required, as is sometimes thought.

Quantity Surveyors retain established offices of their own, and occupy a confidential position, a sort of clearing house, or independent arbitrator on Quantities, between owner and contractor, both before and after a contract is signed, the architect being thus relieved of such duties as straightening out changes, claims for extras, etc., except such supervision as he may wish to exercise.

The writer does not recommend the adoption of what is too often referred to as the English System, for the very reason perhaps, that, having had many years of training and practice with it, he knows its defects for American conditions. What is required is an American Quantity System, practical and all-sufficient for our needs, without unnecessary elaboration. Such a system, involving much thought and labor, had been laid out by the writer prior to the year 1906, but most things burnable in San Francisco were destroyed by fire during April of that year, and the draft "American System" went the way of most other things.

How can the Quantity System be adopted? In the first place standardization and rules for measurements for all classes of work is essential as already suggested. Secondly, the United States Government itself should take the lead in establishing this much needed reform, especially as the saving and betterment are manifest. Lower bids would follow owing to greater detail and clearness of quantity required when being figured. There being no "chances" for each bidder to take, on the quantity of material required, they naturally figure closer, and with great accuracy, so far as missing anything is concerned. It is found, too,

that better construction results are obtained. It is not unlikely that this may also have some bearing upon the cost of future maintenance.

The writer, upon one or two occasions, when in Washington, had the pleasure of discussing the Quantity System with the late Supervising Architect and as a result for some time felt hopeful that some day the Quantity System may be tried out by the Treasury Department. The first step, however, should be towards standardization and determining the best modes of measurement of work, in order that bidders and others may clearly understand the descriptions and form of bill when they are invited to figure.

It is disappointing somewhat to feel that the officials of the United States Government have not been permitted to assume any fairer attitude towards bidders than the common one, of which a certain type of owner is not slow to take the fullest advantage. In short, if a bidder makes an honest mistake in taking off his items, as I hear they frequently do in Treasury Department work, the Department benefits, at the expense of the citizen, who is certainly not human if he does not watch his opportunity to get even. If such a bidder is financially able to pocket the loss, well and good; if not, it is said he fails! Such, then, I believe, are the facts under the present imperfect method employed in securing competitive bids. This, of course, is no fault of the officials themselves. It is now pretty generally understood that the way of inviting bids is antiquated and unsuited to modern construction methods and to the securing of the best results.

To put the matter plainly, here we have probably the most important department of the government adopting precisely those methods in inviting bids, which a certain class of unscrupulous private owners follow when they aim at getting "something for nothing," the kind that lie waiting to catch the unwary bidder, who by reason of the very methods employed in getting his bid, must sooner or later make a mistake in quantities, fall by the wayside and fail, if he cannot survive the loss! It seems inconceivable that such a system should be followed and encouraged. The worst type of private owner pursues the same tactics, and cannot sign up a contract too quickly when he has reason to think a bidder has made a mistake. It is a sad spectacle.

But to resume. Under the Quantity System of inviting bids, bidders would be furnished with a printed or otherwise duplicated copy of the entire Bills of Quantities, segregated, and in separate

sheets for every trade, so that bidders may supply copies to their sub-bidders to estimate upon. Bidders price the items and retain their copies of the Quantities, and make out their bid upon the proposal blank furnished. The lowest bidder then brings his set of quantities to the architect and they are examined in the contractor's presence sufficiently to see that the arithmetic including footings are correct, after which the Bill should be sealed and put into a safe deposit or other secure place and only released upon joint request of and in the presence of both contractor and architect, usually at the end of the contract, and after the Quantity Surveyor and contractor have agreed upon the quantities involved in the additions and omissions ordered to the work during its progress. These variations are embodied in a Bill of Quantities made upon the same basis as the original Bill, and the contractor's unit prices therein are used in pricing all variations from the original contract work, thus there can be no dispute on either side about value of extras or omissions, the method of adjustment to be followed having been clearly set forth in the original Quantities and each bidder notified therein that he should price all his items accordingly.

In some Government department, i. e., in countries where the Quantity System or payment by measurement is in vogue, another application of the Quantity System has been proved to be advantageous and for that reason is followed, for example: Complete printed schedules of every conceivable item that can arise in every trade in a structure are prepared by the Government, with every item carefully computed and priced at current rates. Then when bids are required (for example, repairs, maintenance, additions, or other work to Barracks, Forts, Hospitals, and even buildings), these printed and priced schedules are issued to all bidders with an outline of the volume and character of the work required and location or locations, where it occurs. The bidders examine the printed prices in the schedules, and their proposals are based thereon, subject to whatever percentage of change the bidders deem necessary. For example, it may be ten per cent. above, or four per cent. below such prices, more or less, just as they see fit. Some of the work is standardized and this also facilitates matters. The work progresses and is then measured and priced at the printed prices in the schedule, and whatever per cent. above or below is named or bid by the best bidder in his proposal, this is added to or deducted from the gross amount. The bal-

ance is the total of the contractor's bill, upon the percentage basis which he himself established when bidding. Many years' practical experience with this method of doing Government work prompts me to suggest that for equity, expedition, facility of supervision and sound construction it is in certain cases hard to beat. For other work, regular bills of quantities are furnished to bidders.

The Quantity System undoubtedly saves money to the owner and is an insurance to the contractor against loss through short quantities. It is a mistake to suppose this method means additional cost. If it did, it would not be so largely and generally adopted abroad as it is. Experience has demonstrated the fact that not only is the cost less, but it promotes greater satisfaction, and is conducive to better work. Such is my experience after twenty years of work with the Quantity System and twenty odd years of active work here without it. In fact, where good, honest work and methods are required there is no comparison between the two methods.

Assuming the annual expenditure of the Treasury Department to be now about eight million dollars and putting the saving and benefits under the Quantity System at the very low figure of 5 per cent., the saving to the department would approximate about four hundred thousand dollars a year, at an extremely conservative figure, and which, when the detailed workings of the system were thoroughly understood, and in practical operation, could, I feel certain, be increased. Even the sum named would provide a fund to pay the preliminary work of standardization, and the subsequent expense of a special computing staff to prepare Bills of Quantities to be furnished to all bidders with the drawings and specifications. It is of course the "method" only of securing official bids which the writer criticizes, and regarding which, the necessity for reform is respectfully suggested. Officials are usually unable to do much in the way of betterment until better methods are decided upon by their Chiefs, but there is reason to believe that such a change would not be regarded with disfavor by those who know, and by others who have for years, been contrasting the methods hitherto employed, with others, which give more accurate and better results.

G. ALEXANDER WRIGHT.

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Ridpath & Potter Co. Bourse Bldg., Phila.		Furnaces and Ranges.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.	
John B. Rulon. 1355 Colwyn st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Reinforcing Bars.	
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Chas. H. Robbins. 125 S. 11th st., Phila.		Keystone Supply & Mfg. Co. 931 N. 9th st., Phila.		Roofing.	
Warren-Knight Co. 136 N. 12th st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		The Barrett Co. New York City and Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Garage (Portable)		Roofing Tile.	
Blue Prints.		Service Equipment Co. Bourse Bldg., Phila.		O. W. Ketcham. Builders' Exchange, Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Granite.		Scales.	
F. Weber & Co. 1125 Chestnut st., Phila.		Holmesburg Granite Co., Commercial Trust Bldg., Phila.		The Fairbanks Co. 7th and Arch sts., Phila.	
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Chas. H. Robbins. 125 S. 11th st., Phila.		Barber Contracting Co., 1127 Land Title Bldg., Phila.		C. F. Shellenberger. Builders' Exchange, Phila.	
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O. W. Ketcham. Builders' Exchange, Phila.		Bowers Bros. & Co. 1629 Ludlow st., Phila.		Soundings.	
Brick Renovating.		Heating Boilers.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Adolph Christensen. 1433 Brown st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Ridpath & Potter Co. Bourse Bldg., Phila.	
Builders.		Fleck Bros. Co. 44 N. 5th st., Phila.		John B. Rulon. 1355 Colwyn st., Phila.	
Hogg Construction Co., Inc., 1634 Sansom st., Phila.		Keystone Supply & Mfg. Co. 913 N. 9th st., Phila.		Sprinklers.	
Mitchell Bros. 2125 Race st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Pomeroy Const. Co. 1609 Ranstead st., Phila.		Insurance.		Surety Bonds.	
Builders' Supplies.		Harris J. Latta. Penna. Bldg., Phila.		Harris J. Latta. Penna. Bldg., Phila.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Insurance Co. of North America, 3rd and Walnut sts., Phila.		Terra Cotta (Architectural).	
David France Co., Tasker st. wharf, Delaware River, Phila.		Lighting Fixtures.		O. W. Ketcham. Builders' Exchange, Phila.	
Builders' Equipment.		Staman & Dickey. 30 S. 16th st., Phila.		Test Borings.	
Service Equipment Co. Bourse Bldg., Phila.		Lumber.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Cement.		James E. Tague & Co., 10th and Columbia ave., Phila.		Ridpath & Potter Co. Bourse Bldg., Phila.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Marble Mosaic.		John B. Rulon. 1355 Colwyn st., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		Belfi Bros. & Co. 1923 Market st., Phila.		Tile and Terraza Work.	
Lehigh Portland Cement Co., Finance Bldg., Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.		Belfi Bros. & Co. 1923 Market st., Phila.	
Columns (Metal).		Roman Mosaic and Tile Co. 435 Green st., Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.	
Pearce Fireproof Co. 1345 Arch st., Phila.		Metal Lath.		Roman Mosaic and Tile Co. 435 Green st., Phila.	
Composition Flooring.		General Fireproofing Co., Pennsylvania Bldg., Phila.		Ventilators.	
The Barrett Company, New York and Philadelphia.		Pearce Fireproof Co. 1345 Arch st., Phila.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Philadelphia Mineral Flooring Co., 5632 Summer st., Phila.		Truscon Steel Co. Commonwealth Bldg., Phila.		Wall Board.	
Woodoleum Manufacturing Co., 203 Liberty Bldg., Phila.		Meters.		Cell Board.	
Dampproofing.		Philadelphia Meter Co., Real Estate Trust Bldg., Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.	
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Charles H. Robbins. 125 S. 11th st., Phila.		Service Equipment Co. Bourse Bldg., Phila.		Waterproofing.	
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Electrical Construction.		The Barrett Company, New York and Philadelphia.		Water Supply.	
Baird-Osterhout Construction Co., 1620 Chancellor st., Phila.		Felton, Sibley & Co. 136 N. 4th st., Phila.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
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Cash Capital	-	\$ 4,000,000.00
Reserve for Premiums	-	10,630,740.40
Reserve for Losses	-	4,419,000.00
Reserve for Taxes	-	950,000.00
Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26
TOTAL		\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
Losses Paid Since Organization	-	192,518,273.33

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Fire Insurance	Automobile	Cotton Insurance
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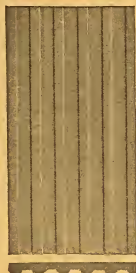
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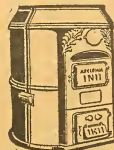
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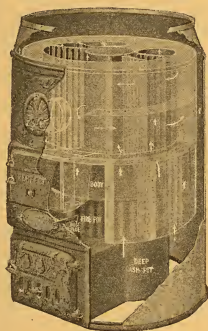
Builders' Guide

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Vol. XXXIII., No. 21
May 22, 1918

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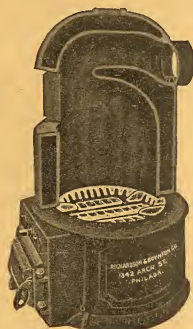
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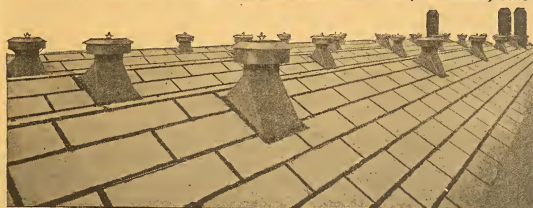
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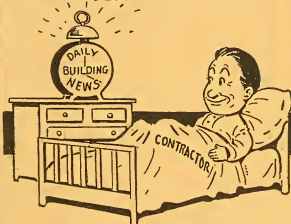
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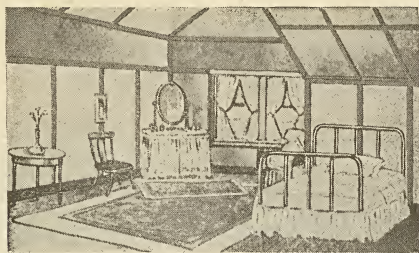
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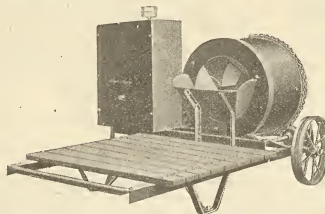
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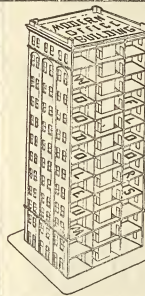
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 21

PHILADELPHIA
May 22, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

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As The Editor Sees It



THROUGH the smoke of the present world-chaos comes a gleam of light; above the din of battle there sounds a new note of human progress. These are best symbolized by the word "Service." On every side we see evidences of the broadening scope of our vision—a searching how best to adapt ourselves to new conditions and to shake ourselves free from the customs of an age that was.

This awakening has been evidenced nowhere more than in the architectural profession—at no time have architects so keenly realized the great opportunity before them for human service. Everywhere the question is "How can we serve the nation?"

These thoughts and desires have now crystallized into definite action and a great world movement inaugurated by the American Institute of Architects.

The following letter, under date of May 14, 1918, received by the Editor, will make clear the import of the wonderful movement:

The American Institute of Architects believes the time has come when steps should be taken toward federating the whole building industry of the United States, in order that the Government may have the most intelligent support and powerful co-operation of all the interests involved.

The war-time need of such action appears to be immediately imperative and it would seem that the first and paramount duty of the building industry is to place its knowledge, skill, and equipment uni-

reservedly at the service of the nation, involving as it does elements and factors of the widest diversification. That service can only reach its maximum of efficiency through intelligent adjustment of all the vital parts. The building industry also owes it to itself seriously to study from the broadest possible viewpoint the inevitable disorganizing influences of war which have already been felt, and through such study to determine what steps can be taken toward bettering conditions and minimizing any further unnecessary disorganization.

With a view to the possible formation of a national organization, which might assume the burden of this tremendous undertaking, the American Institute of Architects accepts the patriotic duty of initiating the movement. To this task the whole building industry should subscribe. As a first step the Institute invites you to send a duly authorized and accredited representative to a conference to be held at the Engineering Societies Building, 25 West Thirty-ninth Street, New York City, beginning at 10 A. M., on June 7, 1918, for the purpose of discussing the situation and determining the method and providing the means whereby such an organization may be created. This invitation is being issued to national and important local organizations, which represent the building industry—whether technical, manufacturing, contracting or labor.

We will greatly appreciate your prompt notification of acceptance of this invita-

tion, and at the earliest possible moment the receipt of the name of the representative whom you will send.

Please address all communications to the Executive Secretary, the American Institute of Architects, The Octagon, Washington, D. C.

Cordially yours,

The Officers and Directors of The
American Institute of Architects,

By THOMAS KIMBALL,

President.

* * *

NONE of the greatest conservation movements in the history of this country is being carried on just now," says N. F. Hoggson, president of Hoggson Brothers, the New York builders. "And it has practically escaped notice. I refer to the remodeling and modernizing of old buildings. To-day, instead of ruthlessly tearing down honestly built, substantial structures, we are looking them over with an eye to adapting them, by skilful alterations, to serve present needs.

"A great number of business buildings throughout the country are being modernized and made over into up-to-date structures through the are of remodeling. This is particularly true in regard to bank buildings. Banks have enjoyed an unprecedented rush of business, and have not only expanded their own departments to aid the Government. The increased business has caused them to become cramped for room. Additional

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space, better facilities, enlarged accommodations, are imperative

The best present solution of the building problem seems to lie in remodelling, in rearranging banking quarters and gaining the required additional space needed by expert planning. The two principal reasons for remodeling are the utilitarian and the aesthetic; the need of more space or more convenience and comfort, and the natural desire to make a

building more pleasing to the eye. Both requirements ordinarily can be met by proper remodelling. This is true not only in regard to banking quarters, but applies equally to the efficient arrangement of space in big business organizations.

An unprepossessing exterior often may be altered into a dignified and imposing facade, while scientific rearrangement of space in a banking room will many times solve the problem of overcrowding.

The question of advertising among architects has been a subject for discussion from all sides during the past few months. Recently, the following letter appeared in the *Journal of the American Institute of Architects*.

To the Editor of the *Journal*:

The paradox in the above heading, as applied to this article, lies in the fact that he who pencils the lines is uncertain if there are any ethics in the subject, let alone the methods, of advertising.

In the *Journal* for October there is printed a summary of the report of the Committee to define the meaning of the word "advertising" in the Institute's Canon of Ethics. Is it not a sign of the times that this matter of advertising seems to be agitating the minds of the members of the American Institute of Architects, and would it be of any interest for a layman to express his views? Would it be considered an intrusion for him to seek entrance into the pages of a journal that is attracting, increasingly, the studious and admiring attention of the outside world? Is it not, in the end, the layman's opinion that counts, and is there not a subtle relationship between what the layman thinks and what the architect feels?

"Public Opinion," with its great composite judgment, dominates our lives, but it shifts with the times, and behold the times are shifting fast at present! It is that fact which calls for a readjustment of our old opinions, if not their extermination; and while Democracy is demonstrating its own definition in political and social life, are the professions seeking to entrench themselves against it? We know that custom prints the most rigid of rules; yet the type may become worn and require recasting—likewise the rules.

What is advertising? According to the dictionaries it is merely "a public notice." As every professional man desires the public to take notice of him—in fact, is dependent upon the notice the public does take—it remains only to approve or condemn the method he uses to attract attention, and therein lies the question of ethics or art. What the man who is established may do is not, in all likelihood, the example for the beginner to follow. A certain method might be sufficient for one and insufficient for the other. One has to hold attention; the other gain it. Each may have the same standards of honor; the same feelings of dignity and delicacy; the same aversion from thrusting himself forward. Both desire publicity, and neither wishes to seem to desire it.

Advertising, as applied to the practice of architecture or to the practice of any other professional calling, is, after all, a question of etiquette, and, without doubt, largely doctrinal. Unquestionably it is a matter of taste; and certainly a profession of gentlemen—such as the profession of architects is supposed to be—does not require the canons of good taste defined.

If an architect desires patronage and feels that he has mental wares the public should purchase, why should he not frankly let it be known? Why hide his light under the proverbial bushel and wait for it to be uncovered, perhaps when the light is nearly burned out?

I have not lost sight of the pitfalls in the profession of advertising—I mean, architecture. Is there any very great difference between sending out engraved cards to a selected list of possible clients, announcing the formation of a partnership, and inserting a card in the advertising columns of a newspaper? Is there any good reason why the former, practiced quite generally, should be sanctioned, while the latter, when resorted to by struggling beginners, should be condemned? or, again, is there an appreciable difference between the architect who permits his name to be attached to a large, notable building that is pictured in conjunction with an advertisement for some brand of cement or make of terra-cotta or tiling, and the architect who simply or frankly lists his references? If these things are taboo, then the architect is solely dependent for his endorsement and advertisement on Public Opinion, and a chance or casual Public Opinion at that. If straightforward frankness in seeking his business is denied the architect, through the rulings of the Institute on "ethics," then wire-pulling, the most miserable and unworthy of methods, is the only resource left to him to attract public attention: gambling on the credit of friendship; manipulating the power of influence; making any man or woman he can his agent.

Not all young architects are able to enter the offices of established firms and eventually work into partnerships. Many have to start out alone, prevented at the outset from seeking work in a natural way by the desire to keep in repute with the Institute through adhering to its ethical rulings. (If they are ethical, how can they be rulings?) Cherishing these established ideals, they let anxiety weaken their ability and strength, until they resort to the alternative you (I address the

Institute) unwittingly prescribe by your rulings.

Gentlemen: I beg you to think of the worthy but unfortunate, and also with some sentiment, as well as reason, of the young men starting out in these days of difficult competition; to remember, some of you, your own struggles, that, except for sheer luck, oftentimes, would have been failures; to consider, as well, some of the methods you have used, and must regret, and are perhaps lamenting that you must still use, to hold your own.

A new future lies before those of us who shall survive this world's great cataclysm, and the heaven of that future is working in the present. Make of the Institute a great, broad-minded, progressive, democratic example. I am not recommending the practice of advertising when I question the Institute's rulings against it. Far from it! I believe simply that freedom of action will create higher standards and that desirable and undesirable advertising will be less often confused. In devising Canons of Ethics, and in attempting to define the indefinable, are you not lowering to the scale of weights and measures those things that belong to instinct, to conscience, to honor? Give "the image and not the formula." Wipe out your rulings. Countenance straightforward methods of advertising and so rob the impostor, the architectural quack, of his very means of success. Encourage the recognition of honest opportunities and their profitable use; then punish where punishment is due and where the offense is flagrant and unquestionable.

Some architects not affiliated with your organization (and what percentage of the architectural profession does it represent?) have followed certain methods that you condemn. They are not dishonest from any point of view and "unethical" only from your own. These men have been stigmatized as "commercial architects;" "they label and pigeon-hole their wares;" "they have standardized their ideas;" "they have played," it is asserted, "like the patent-medicine maker, on the credulity of the public." But have they? Do they claim more than they prove? They have built great buildings that stand the tests, and even academic criticisms, whereas, some of your approved men, who have won competitions over which you presided, have erected structures that challenge apology, and to say the least, have been so composite in style that they represent, in detail, about every period of architecture.

I have in mind one that has attracted wide attention and won high praise. It is a stupendous pile of masonry, and I feel when I stand under it, regarding it en masse, as I do when I am close to El Capitan in the Yosemite Valley. Yet, ah yet, there comes to my mind an amusing incident in reference to this same building. An observant woman said to me the other day, "How is it that architects can put French grilles over the windows of a purely classic building?" And I replied, "My dear, they can do anything, if they know how." I am fully aware that I left her puzzled.

(Continued on Page 327.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING;
CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Foundations, Navy Yard, Philadelphia. Architect, private plans. Owner, U. S. Government, care of C. R. O'Leary, Navy Yard, Philadelphia. Reinforced concrete, concrete foundations and piles for machines and equipment, timber piles, waterproofing. Owners taking bids duty May 22nd at 11 A. M. A. L. Carhart, Penfield Building is figuring.

Recreation Park, 57th and Haverford avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owner, City of Philadelphia, Board of Recreation, 587 City Hall. Cement coping, iron fence and gates, wire screen, brick work, blue stone curb (plumbing, separate bids). Low bidders Robbins Cont. Co., Lafayette Building, \$12,941 Wm. Mundy, 228 S. Alder street, \$13,400.

Fire Escapes, 2100-02-04-06 Chestnut streets, Philadelphia. Architects, Harris & Richards, Drexel Building, Philadelphia. Owner, name withheld. Brick and stone, 4 stories tin roof, electric lighting, fire and kalamain doors, hollow metal sash, safety treads, fire escapes, ornamental iron work. Architects taking bids due May 23rd. H. J. Baton, 1713 Sansom street; Smith-Hardican Co., 1606 Cherry streets; Frank G Stewart, 1619 Sansom street, and J. Morris Daniels, 252 S Juniper street, are figuring.

Residence (alterations) to Apartments, 1516 Diamond street Architects, Chas. W. Bolton & Sons, Witherspoon Building, Philadelphia. Owner, John J. Bannon, Laghorne, Pa. Partitions, plastering, plumbing, fire escapes, steam heating, electric lighting, tile work. Owner is taking sub-bids.

Pipe Station (fire repairs), York road and Champlost street. Architect, Jos. A. Roetter, City Hall, Philadelphia. Owner, City of Philadelphia, Department of Public Safety, City Hall. Consists of fire repairs. Lowest bidder: Geo. Dobbins, 42nd and Chester avenue, \$1,517.

Residences (40), 60th and Larchwood avenue, Philadelphia Owners, Marshall & Gorman, 8 S. 52nd street, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Brick, stone and stucco, 2 stories, stone foundations, 16x31, slag and asphalt shingle roofs, parquetry floors, cement work, hot water heating, combination lighting. Plans completed. Owners are ready for sub-bids.

Church, Broad and south streets, Philadelphia. Architects, Stewardson & Page, 316 Walnut street, Philadelphia. Owners, Protestant Episcopal Diocese of Pennsylvania, care of Rt. Rev. P. M. Rhinelander. D. D. Church House, 12th and Walnut streets, Philadelphia. Work contemplated. Too early for details.

Store and Residence, 517 S. 5th street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Joseph J. Cohen, 523 S. 5th street, Philadelphia. Brick, 3 stories, consists of general interior alterations rear addition, flush bulks, etc. Owners taking bids. Joseph Farbstein, 908 Walnut street, is figuring.

Hospital (alt. and add.) (Sun parlor), 39th and Powelton avenue, \$3,100. Architect, private plans. Owners, Presbyterian Hospital, on premises. Brick, 2 stories, 13x 21, tin roof, plumbing. Owners will build.

Factory, 7th and Wood streets, Philadelphia. Architect, H. M. Hokanson, 1713 Sansom street, Philadelphia. Owner, Chas. W. Lawser, 623 Wood street, Philadelphia. Brick and tile, 2 stories and basement, 90x 51, slag roof, cement floors, rolled steel and hollow metal sash and skylights, fire doors, roof ventilators. Owners taking bids due as soon as possible. Stacy Reeves & Sons, 2011 Market streets.; Warren-Moore Co., Colonial Trust Building; A. R. Raff Cont. Co., 1635 Thompson street; Cramp & Co., Denckla Building, and Roydhouse-Arey Co., 112 N. Broad street, Philadelphia, additional bidders.

Hospital Buildings, League Island Navy Yard, Philadelphia, \$300,000. Architect, private plans. Owner, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Yard, Philadelphia. Brick, concrete and frame. Plans in progress. Too early for details.

Hospital Buildings, U. S. Naval Home, 24th and Gray's Ferry road, Philadelphia, \$300,000. Architect, private plans. Owners, U. S. Government, care of Bureau of Yards and Docks, C. W. Parks, Chief, Navy Department, Washington, D. C. Brick and concrete plans in progress.

Store Building, 232-34 N. 15th street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Name withheld. Brick (slow burning construction) 2 stories, 40x120, slag roof, stone foundations, electric lighting, tile work, hollow metal skylights, fire doors, pine and composition floors, metal lath, elevators, metal ceilings (heating, reserved). Architect taking bids due as soon as possible. Albert Zelfelder, 151 S. Broad street, E. J. Kreitzburg, 1345 Arch street, is figuring.

Moving Picture Theatre, Ritner street and Moyamensing avenue, \$35,000. Architect, H. B. Weldon, 1606 Cherry street, Philadelphia. Owner, Morris Gerson, 1018 Ritner street, Philadelphia. Brick and steel, 1 story, 80x120, slag roof, stone foundations, tile and marble work, cement floors, metal lath, roof ventilators. Owner will take sub-bids in two weeks.

Store Building, 140-142 S. 52nd street,

Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Henry Felt, 52nd and Girard avenue, Philadelphia. Brick and steel, 2 stories, 40x49, slag roof, stone foundations, steam heating, electric lighting, tile and marble work, hollow metal skylights, flush bulks, pine floors, metal lath, metal ceilings, dampproofing, ornamental iron work. Architect taking bids due May 27th. Smith-Hardican Co., 1606 Cherry street.; Lam Building Co., 1001 Wood street, and F. B. Davis, 240 N. 16th street; E. E. Hollenback, Inc., 1804 Brandywine street; Wm. R. Dougherty, 1610 Sansom street, are figuring.

School Building, 30th and Dickinson streets, Philadelphia. Architect, E. F. Durang & Sons Co., 1220 Locust street, Philadelphia. Owner, St. Gabriel's R. C. Church, care of Rev. Jas. A. Holahan, 29th and Dickinson streets, Philadelphia. Port Deposit granite, 3 stories, 60x112, slate roof, stone foundations, steam heating, electric lighting. Plans in progress. Architect will take bids in one week.

Residence (alt. and add.), 608 Cliveden ave. Addison H. Savery, St. Girard Building, Philadelphia. Owner, Harrison I. Potts, on premises. Consists of interior and exterior alterations, front and rear porches, balconies, slag, tin and canvas roofs, cement work, structural steel, plumbing. Architect taking bids due May 23rd at noon. Wm. C. Wright, 22 Harvey street; Fred Elvidge, 5522 Germantown avenue; Charles Johnson, 5201 Boyer street; Samuel Hardig, 203 Johnson street; J. A. Dunkelberger, 71 E. Herman street; W. J. Gruhler, 219 E. High street, and R. C. Ballinger & Co., 218 N. 13th street, are figuring.

Factory, 80th and Bartram avenue, Philadelphia. Architect, Amos W. Barnes, Hermit and Righter streets, Roxborough, Philadelphia. Owner, Richard L. Wallace Co., 120 Chestnut st. Brick and reinforced concrete, 1 story and 2 stories, 76x39 and 50x60, slag roof, cement and maple floors, rotal window guards, rolled steel sash, fire doors, ornamental iron work (heating, plumbing, lighting and elevator, reserved). Architect has received bids.

Freight Station, Cheltenham and Germantown avenues, \$3,570. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owner, Philadelphia and Reading Railway Co., 12th and Market streets. Brick, 1 story, 28x30, slag roof, cement floors, electric lighting. Owner will build.

Residence, 4600 N. Warnock street, Philadelphia, \$4,000. Architect, private plans. Owner, William J. Baltz, 109 Butler street, Philadelphia. Brick, 2 stories, 16x45, slag roof, stone foundations, hot water heating, combination lighting. Owner will build.

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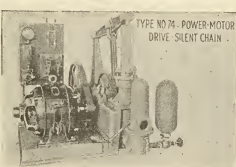
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Pennsylvania Building

Boiler House, Delaware avenue and Mifflin street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Mifflin Chemical Co., Delaware avenue and Tasker street. Brick, concrete piles and steel work, stone and concrete foundations. Architect taking bids due May 29th. Doyle & Co., 1519 Sansom street, and F. A. Havens Co., 845 N. 19th street, are figuring.

Mill Buildings (alts. and add.), 25th and Spruce streets. Architects, Day & Zimmerman, 611 Chestnut street, Philadelphia. Owners, Cleveland Worsted Mills, Allegheny and Emerald street. Consists of new office building, brick, 1 story, 24x30, slag roof (2), fire towers, brick, rearranging toilet rooms, plumbing, (1) freight elevator. Architects are taking sub-bids.

Store and Dwelling (alts.) 815 S. 2nd street, Philadelphia. Architect, Herman H.

Kline, 6th and Mifflin streets, Philadelphia. Owner, H. Plotnick, care of architect. Brick, 3 stories, 17x58, slag roof, general remodeling, tile floors, hot water heating, electric fixtures, marble work, flush bulk, metal ceilings, cabinet work. Plans about completed. Architect will take bids in a few days.

Power House and (2) Transfer Houses, Spec. 2952, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel and reinforced concrete, 2 and 1 story, 15x57, and (2) 30x16, slate roof, electric lighting, rolled steel sash, fire and hollow metal doors, hollow tile, roof ventilators, waterproofing, wire work, ornamental iron work. Lowest bid submitted by Thos. Reilly Co., 1635 Thompson street, Philadelphia, \$130,000, time 120 days.

steel, 1 story, 64x190, slag roof, stone foundations, electric lighting. Contract awarded to H. F. Dinkelacker, 227 N. Farnson street. Warehouse, Morris and Bambray streets, Philadelphia, \$21,000. Architect, private plans. Owner, Chas. A. Shetzline, 2201 S. Broad street, Philadelphia. Brick and steel, 1 story, 55x200, slag roof. Contract awarded to H. F. Dinkelacker, 227 N. Farnson street.

Factory (add.), 311 N. Randolph street, Philadelphia, \$4,000. Architect, private plans. Owners, Berko Bros, Randolph and Wood streets, Philadelphia. Brick, 2 stories, 18x50, slag roof, pine floors, stone foundations (heating and lighting, reserved). Contract awarded to M. Yellin, 712 N. Franklin street.

Factory (add.), 713-15 Cherry street, Philadelphia. Architect, John V. Speth, 1615 Sansom street, Philadelphia. Owner, J. F. Burns, on premises. Brick, mill work, 5 stories and basement, 30x52, slag roof, pine floors, hollow metal skylights, fire doors, ornamental iron work. Contract awarded to John V. Speth, 1615 Sansom street, Philadelphia, who is taking sub-bids.

Residences (2), Claridge and St. Vincent streets, Philadelphia, \$6,000. Architect, private plans. Owner, Peter Hassler, 2834 N. Lawrence street, Philadelphia. Brick, 2 stories, 15x40, stone foundations, slag roof, hot water heating, electric lighting, pine floors. Contract awarded to M. Stevens, 910 Fanshaw street.

Store and Residence (alt and add.), 317 Spruce street, Philadelphia. Architect, Fred H. Greisler, Lafayette Building, Philadelphia. Owners, David Salkind Co., 226 Race street. Brick, 3 stories, 15x20, slag roof, hot water heating, electric lighting, plumbing, yellow pine floors. Contract awarded to Schechtman Bros., 1540 N. 6th street.

Dwellings (3) 65th and Upland streets, Philadelphia, \$9,500. Architect, private plans. Owner, Rose Salasin, 2011 S. 13th street, Philadelphia. Brick, 2 stories, 15x39, slag roof, pine floors, hot air heating, electric lighting. Contract awarded to S. Levin, 2020 S. 65th street, Philadelphia.

Factory (add.), 2411 Norris street, Philadelphia, \$16,000. Architect, private plans.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Temporary Barracks, Frankford Arsenal, Philadelphia. Architect, Edwin J. Bewter, Frankford Arsenal, Philadelphia. Owner, U. S. Government, care of Colonel Hof, Frankford Arsenal, Philadelphia. Frame, 3 stories, 40x100, ready roof, concrete and pine floors, steam heating, electric lighting, waterproofing. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, Philadelphia.

Office Building (alts.), 28 E. Chelton avenue, Germantown, \$3,700. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Bell Telephone Co., 17th and Arch streets, Philadelphia. Consists of interior alterations, plastering, painting, mill work, metal bath. Contract awarded to F. L. Hoover & Son, 1023 Cherry street.

Factory, State road and Robbin street, \$8,000. Architect, private plans. Owners,

Commercial Products Co., 6822 N. Broad street. Brick, 1 story, 60x100, slag roof, stone foundations, cement floors. Contract awarded to Anton Ahlers, 3425 Howell street.

Building, No. 25 (add.), Spec. 2976, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. R. O'Leary, Pay Inspector, Navy Yard, Philadelphia. Reinforced concrete and brick, 2nd story additional, 162x59, steam heating (electric lighting, reserved), terrazzo work, fire doors, iron stairs, ornamental iron work, pine floors, electric elevator, safety treads. Contract awarded to W. O. Springer, 1624 Latimer street, \$45,960, 120 days.

Warehouse, 23rd and Passyunk avenue, Philadelphia, \$26,000. Architect, private plans. Owner, Burton C. Simon, 19th and Passyunk avenue, Philadelphia. Brick and

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Owner, Standard Dental Mfg. Co., on premises. Brick (slow burning construction), 2 stories, 41x75, slag roof, cement and pine floors, stone foundations (heating and lighting, reserved). Contract awarded to P. Halbach Cont. Co., 26th and Thompson street.

Residence (alts.), 13th street near Oak Lane avenue, Oak Lane. Architect, Geo. S. Idell, 34 S. 16th street, Philadelphia. Owner, C. E. Doan, Sedgwick, Pa. Stone, 2½ stories, bath room and porch addition, shingle roof, tile work. Contract awarded

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to Hogg Contracting Co., 1634 Sansom street, Philadelphia.

Factory, Ridge avenue and Calumet street, Philadelphia, \$5,000. Architect, private plans. Owners, Powers, Weightman & Rosengarten, 9th and Parrish streets. Brick, 1 story, 70x55 and 32x37, slag roof, cement floors, electric lighting. Contract awarded to R. C. Ballinger & Co., 218 N. 12th street.

bids due May 23rd. Specht & Sperry, Heed Building; W. John Stevens, Inc., Wyncote, Pa.; J. Sims Wilson Co., 1125 Brown street, and A. Graupner, care architect, are figuring.

Warehouse, Pottstown, Pa. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, Gudebrod Brothers, Pottstown, Pa., 2 stories, 35x100, slag roof, concrete and pine floors, fire doors. Contract awarded to Fred H. Kaiser, Pottstown, Pa.

Nurses' Home, Phillipsburg, Centre Co., Pa. Architect, Geo. S. Idell, 34 S. 16th street, Philadelphia. Owner, Phillipsburg Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½, slate roof, pine floors (heating, lighting, and plumbing, separate bids). Lowest bid submitted by Mr. Gearhard, Phillipsburg, Pa.

Residence (alt. and add.), Haverford, Pa. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owner, Haverford College, Haverford, Pa. Stone and hollow tile, 1 story, slag roof, pine floors, new bath room and one room addition, heating undecided. Architect will take bids in a few days.

Garage, Rosemont, Pa. Architects, Duh-ring, Okie & Ziegler, Bailey Building, Philadelphia. Owner, Mrs. Samuel Vaulain, Rosemont, Pa. Brick and frame, 1 story, 24x39, shingle roof, cement floor, hot water heating, electric lighting (gasoline storage system, reserved). Architect have received bids.

Housing Project, Chester, Pa. (2nd and 5th Wards). Architect, private plans. Owner, Sun Ship Building Co., Chester, Pa. Brick, 2 stories. Plans in progress. Work contemplated.

Garage and Chauffeur's Quarters, near West Chester, Pa. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, name withheld. Stone, 2 stories, 50 ft. front, 2 wings, slate roof, cement and wood floors, hot water heating, electric lighting. Architect taking bids. Claude Baldwin, Jos. M. Burns, Wm. H. Jones, all of West Chester, Pa. are figuring.

Store Building (alt. and add.) Chester, Pa. Architect, private plans. Owner, Samuel Braunstein, Chester, Pa. Brick, 3 stories, 40x60, steam heating, electric lighting, tile and marble work, hardwood floors. Builders, R. H. Scroggins & Son, Crozer Building, Chester, Pa., are taking sub-bids.

PENNSYLVANIA Construction News

Residences (5) Brookline, Pa. Architect, private plans. Owner, John V. Speth, Brookline, Pa. Frame and stucco, stone foundations, 2½ stories, shingle roof, hot water heating, electric lighting and fixtures, tile and marble work, parquetry floors, mill work, sheet metal work, painting, papering, plastering and glazing. Owner is ready for sub-bids on all lines.

Parish House, Garrett road and River-view avenue, Drexel Hill, Pa. Architect, private plans. Owner, Episcopal Chapel of the Incarnation, care of Mr. Cassalf, Chairman Building Committee, Drexel Hill, Pa. Stone, 1 story and basement, 28x74, slate roof, stone foundations, steam heating, electric lighting, cement and pine floors. Owners taking bids due as soon as possible. H. H. Burrell, 206 S. Quince street, and Pomeroy Construction Co., 1609 Ranstead street, Philadelphia, additional bidders.

Residence, Scranton, Pa. Architect, Lewis Hancock, Scranton, Pa. Owner, name withheld. Brick 2½ stories, 36x37, shingle roof, hardwood floors, electric lighting. Plans in progress.

Warehouse, Scranton, Pa. Architect, E. H. Davis, Scranton, Pa. Owners, Maccar Truck Co., Scranton, Pa. Frame, 1 story, 50x100, slag roof. Architect is taking bids.

Zoo Building (add.), Scranton, Pa. Architect, J. J. Howley, Scranton, Pa. Owner, City of Scranton, Department of Public Works, Scranton, Pa. Concrete work and iron fence. Plans completed. Owners are ready for bids.

School (alt.), Olyphat, Pa. Architect, E. H. Davis, Scranton, Pa. Owner, School Dis-

trict of Olyphant, Olyphant, Pa. Brick, 3 stories, consists of steel girders, carpentry. Owners taking bids due May 27th.

Store and Apartments, Nanticoke, Pa. Architect, A. Reilly, Wilkes-Barre, Pa. Owner, Chas Wasilewski, Nanticoke, Pa. Brick, 2 stories, 34x47, slag roof, pine floors, electric lighting. Owner taking bids.

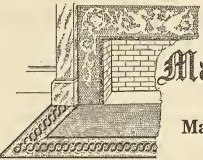
Roosevelt School (add.), Olyphant, Pa. Architect, J. J. Howley, Scranton, Pa. Owner, School Board of Olyphant, Olyphant, Pa. Frame and stucco, 2 stories and basement, 43x72, slate roof, steam heating, electric lighting, yellow pine floors. Owners taking bids.

Bungalow, S. Main street, Wilkes-Barre, Pa. Architects, Knapp & Bosworth, Wilkes-Barre, Pa. Owner, Geo. Inman Wilkes-Barre, Pa. Frame, 2 stories, 28x31, slate roof, vapor heating, oak floors, electric lighting. Architects taking bids. A. D. Thomas, Geo. T. Ecker & Co, Otto Behrens, W. J. Kear, Fred Eddy and Nalkeme Bros., all of Wilkes-Barre, Pa., are figuring.

School, Throop, Pa. Architect, J. J. Howley, Scranton, Pa. Owner, School District of Throop, Throop, Pa. Brick, 2 stories, 153x95, slag roof (hot water heating, electric lighting and plumbing, reserved), pine floors. Low bidder, Boland Bros., Spruce street, Scranton, Pa.

Garage, High School and Upland road, Elkins Park, Pa. Architect, H. Rex Stackhouse, 129 S. 5th street, Philadelphia. Owner, Joseph B. Haber, on premises. Frame, stucco and brick, 2 stories, 23x21, slate and tin roof, stone foundations, hot water heating, electric lighting metal lath, cement and pine floors. Architect taking

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PENNSYLVANIA Contracts Awarded

Storage Building, Bristol, Pa., \$4,000. Architect, private plans. Owners, Eddystone Refining Co., 3144 Passyunk avenue, Philadelphia. Frame, 1 story, 60x63, ready roof, pine floors, electric lighting, roof ventilators, metal window guards, wire work. Contract awarded to Metzger & Fisher, Otis Building.

Buildings (10) Eddystone, Pa. Architect, private plans. Owners, Eddystone Ammunition Co., Eddystone, Pa. Frame, 1 and 2 stories, turn stiles, shipping room and employment office, 88x66, tin roof, pine floors. Contract awarded to R. H. Scroggins & Son, Chester, Pa.

Store Building (alt.) 33 S. Main street, Wilkes-Barre, Pa. Architects, Knapp & Bosworth, Wilkes-Barre, Pa. Owner, C. R. Wood Building, Wilkes-Barre, Pa. Brick, 3 stories, electric lighting, plastering, carpentry. Contract awarded to A. D. Thomas, Wilkes-Barre, Pa.

Bakery (alt. and add.), Wilkes-Barre, Pa. Architect, private plans. Owner I. L. Kraft, 53 E. Market street, Wilkes-Barre, Pa. Brick, 1 story, 34x38, slag roof, cement floors. Contract awarded to I. H. Leach, Wilkes-Barre, Pa.

School, Du Pont, Pa. Architects, Morris & MacHale, Scranton, Pa. Owner, Parish of the Sacred Heart, Du Pont, Pa. Frame, 2 stories, 6 rooms and auditorium, steam heating, shingle roof, pine floors. Contract awarded to F. Bojanski, Kingston, Pa.

School (add.), Archbald, Pa. Architect, Louis Hancock, Mears Building, Scranton, Pa. Owner, School Board of Archbald, Archbald, Pa. Brick, 2 stories, 35 and 16x90, shingle roof, pine floors. Contract awarded to P. J. McAndrew, Archbald, Pa.

Orphanage, Nanticoke, Pa. Architects, Harris & McHale, Burr Building, Scranton, Pa. Owner, St. Stanislaus Orphanage, care of architects. Hollow tile and stucco, 2 stories and basement, 130x120, tile roof, steam heating, electric lighting, tile work, hollow metal skylights, hardwood and composition floors, hollow tile, metal lath, fire towers, safety treads, iron stairs. Contract awarded to Hagen Lumber Co., Scranton, Pa.

Washington School (alt.), Duryea, Pa. Architect, Lewis Hancock, Scranton, Pa. Owner, School Board, Duryea, Luzerne Co., Pa. Frame, 2 stories, slate roof, carpentry. Contract awarded to J. W. Canimer, Scranton, Pa.

NEW JERSEY Construction News

Family Apartment House, Atlantic City, N. J. Architect, Mr. Hewitt, Guarantee Trust Building, Atlantic City, N. J. Owner, Oliver Bryan, 12 S. Stenton avenue, Atlantic City, N. J. Brick, 3 stories, 18x65, slag roof, pine floors, hot water heating, electric lighting, owner is taking sub-bids.

Warehouse (alt.), Trenton, N. J. Archi-

tect, Wm. Kleeman, Trenton, N. J. Owner, Alex. Klinkowstein, Trenton, N. J. Brick, 3 stories, 30x60, slag roof, cement floors, electric lighting. Plans in progress.

School, Juliustown, Burlington Co., N. J., \$7,000. Architect, Harry Hill, Trenton, N. J. Owner, School Board of Juliustown Township, care of Frank Bosarth, Clerk,

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AWARDING A CONTRACT

R. F. D. Burlington, N. J. Frame, 1 story, 75x40, pine floors, Waterbury heaters. Owners taking bids. J. S. Rogers Co., Moorestown, N. J.; Lewis C. Mathis, Medford, N. J.; Geo. W. Shaner & Son, Palmyra, N. J., and Mr. Suttis, Browns Mills, N. J., are figuring.

Office Building (add.), Camden, N. J. Architect, private plans. Owner, New York Shipbuilding Co., Camden, N. J. Brick and concrete, 2 stories (2) wings, 60x40, slag roof, pine floors, steam heating, electric lighting, metal lath. Owners taking bids due as soon as possible. J. S. Rogers Co., Drexel Building; Doyle & Co., 1519 Sansom street, Philadelphia; Fraser, Brace & Co., 1320 Broadway, New York City, and Geo. Bachmann, 19 N. 30th street, Camden, N. J., are figuring.

Machine Shop and Drafting Room (alts.), Camden, N. J. Architect, private plans. Owners, Joseph Campbell Co., Camden, N. J. New office partitions, cement floors, new plumbing. Owners taking bids due as soon as possible. J. S. Rogers Co., Drexel Building; Irwin & Leighton, 126 N. 12th street, and Turner Concrete Steel Co., 1713 Sansom street, are figuring.

Miscellaneous Construction News

Office Building, Hamilton, Ohio. Architects, Harris & Richards, Drexel Building, Philadelphia. Owner, Niles Tool Works, Hamilton, Ohio. Brick, concrete and steel, 3 stories, 75x135, composition roof, stone foundations, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash and skylights, fire doors, concrete, maple and hardwood floors, metal lath, elevators, safety treads, roof ventilators, ornamental iron work. Plans completed. Owners are ready for bids.

Naval Training School Extension, Spec, 2925, Hampton Roads, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story, jarracks, 128x27, latrine, 94x24, mess hall, 262x62, kitchen, 118x40, dispensary, 90x123, concrete scrub room, 40x24, isolation ward, ready roofing.

Buy pure lime, 99% pure, no core, no grit. **DAVID FRANCE CO.**,
Tasker Street Wharf, Delaware River, Phila. Both 'phones.

HEATING

BOWERS BROS. & CO.

1629 Ludlow Street
Philadelphia, Pa.

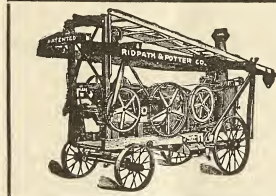
steam heating, electric lighting, cement and wood floors, plumbing, painting and glazing. Contract awarded to King Lumber Co., Charlottesville, Va.

Store and Office (alt.), 716 Market street, Wilmington, Del. Architect, J. D. Thompson, Ford Building, Wilmington, Del. Owner, Hurley Powell Co., on premises. Brick, 3 stories, 20x100, carpentry, plastering, maple floors, electric lighting. Architect taking bids due May 16th. John E. Healy & Son, Wilmington, Del., are figuring.

Residence (alt.), 819 Washington street, Wilmington, \$5,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, John Govatos, on premises. Brick, 3 stories, slate roof, vapor heating, electric lighting, hardwood floors. Plans completed. Architect ready for bids.

Hall (int. alt.), 2nd and Justison street, Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Board of Education, care of Mr. Guthrie, Secretary, Wilmington, Del. Brick, 3 stories, 56x70, mill work, plastering, tile and marble work. Plans completed. Architect ready for bids in a few days.

Mine Laboratory, Spec. 2937, Navy Yard, Washington, D. C. Architect, private plans. Owner, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete and brick, 2 stories, 120x60, slag roof, steam heating, electric lighting, tile, marble and terrazzo work, composition, maple and mastic floors, metal lath, safety treads, roof ventilators, fire doors,



We Drill Wells and Get Water Test Borings and Soundings

LET US SUBMIT PRICES

RIDPATH & POTTER CO

487 Bourse Building
Philadelphia, Penna.

iron stairs, waterproofing, wire work, ornamental iron work. Lowest bid submitted by Sumner Sollitt Co., Pullman Building, Chicago, Ill.

Residence and Garage, Tonawanda, N. Y. Architects, De Armond, Ashmead & Bickley, Franklin Trust Building, Philadelphia. Owner, Carl V. S. Patterson, Tonawanda, N. Y. Frame and stucco, 2½ stories, 30x60, wing, 25x25, garage, 1 story, 15x22, white pine shingle roof, hot air heating, hardwood floors. Plans in progress. Will take bids in two weeks.

Warehouse, Parkersburg, W. Va. Architect, private plans. Owners, Standard Oil Co., care of General Eng. Department, Elizabeth, N. J. Reinforced concrete and steel, 2 stories, 57x101, slag roof, electric lighting, rolled steel sash, hollow metal skylights, metal doors, dampproofing, hollow tile. Owners taking bids. Price Construction Co., Maryland Trust Building, Baltimore, is figuring.

floors. Owner will take bids in about two weeks.

Store and Dwelling, 3703 Claremont street, Highlandtown, Md. Architect, J. Owens, Equitable Building, Baltimore, Md. Owner, Louis Aielle, 3701 Claremont street, Highlandtown, Md. Brick, 2 stories, flush bulks, slat roof, hot water or vacuum vapor heating, combination lighting, dampproofing, plastering, painting and plumbing. Architect is taking bids. C. E. Stubbs, Equitable Building, Baltimore, is figuring.

Shed, Key Highway and B. & O. R. R., Baltimore, Md. Architect, private plans. Owners, McArdle & Cooney, 8 E. Lombard street, Baltimore. Steel or galvanized iron and concrete, 30x156. Owners taking bids. C. D. Pruden & Co. and Trussed Concrete Steel Co., Baltimore, Md., are figuring.

Maryland

Contracts Awarded

Church (add.), Fort avenue and Towson street, Baltimore, Md. Architect, Geo. R. Callis, Knickerbocker Building, Baltimore. Owner, Our Lady of Good Counsel Church, on premises. Brick, stone trim, tile, marble and slate work, electric lighting, ventilators, dampproofing, plastering, painting, plumbing, ornamental iron work. Contract awarded to E. Eyryng & Son, 800 S. 3rd street, Baltimore.

Church (alts.), Fayette and Aisquith streets, Baltimore. Architect, Geo. Callis, Knickerbocker Building, Baltimore. Owner, Machzieky Hoday Cong., on premises. New gallery, mill work, steel and iron work, plastering and painting. Contract awarded to Louis Ullman, 418 Aisquith street, Baltimore.

Building (alts. and add.), 1026-28 Linden avenue, Baltimore, Md. Architect, J. R. Forsythe, 4307 Penhurst avenue, Baltimore. Owner, Home Friends' Society, on premises. Brick and stone, 2 stories, 40x80, slag roof, steam heating, electric lighting, hollow metal skylights, ventilators, painting, plastering, tile and slate work, plumbing. Contract awarded to W. G. Hammond, 1520 Linden avenue, Baltimore.

Garage and Blacksmith Shop (alts.), 1315-19 Harford avenue, Baltimore. Architect, private plans. Owner, F. T. Lynch,

MARYLAND

Construction News

Mausoleum, Mt. Olivet Cemetery, Baltimore, Md. Architect, Theo. W. Pietsch, Baltimore, Md. Owner, M. Meyerdrick Estate, 100 W. Fayette street, Baltimore. Granite and marble, bronze work, concrete foundations. Architect taking bids due May 23rd. Hilgartner Marble Co., Wm. Gaul, Matthew Gaul, Evans Marble Co., Hugh Sisson Co. and H. P. Rieger & Co., all of Baltimore, Md., are figuring.

Theatre (alts.), 30 W. Lexington street, Baltimore, Md. Architects, Blanke & Zink, Equitable Building, Baltimore. Owner, Parkway Theatre Co., 1921 N. Charles street, Baltimore. New concrete floors, reinforced concrete gallery, new front, tile work heating, plumbing, plastering, painting. Owners are taking bids. E. Eyryng & Son, 800 S. 3rd street, Baltimore, Md., are figuring.

Store (alts.), 25th street near Maryland avenue, Baltimore. Architect, J. R. Forsythe, 4307 Penhurst avenue, Baltimore. Owners, Harvey Bros., on premises. New

flush bulks, glazing, electric lighting, ventilators, plastering, painting. Owners are taking bids.

Bathhouse. (alts.), 1114 E. Lombard street, Baltimore, Md. Architect, Callis & Callis, 2055 Kennedy avenue, Baltimore. Owner, Harris Stromwater, 1123 E. Lombard street, Baltimore. Tile and terrazzo work, plumbing, steam heating. Owner is taking bids.

Store (alts.), 1200 S. Linwood street, Baltimore, Md. Architect, Geo. R. Callis, Jr., Knickerbocker Building, Baltimore. Owner, Thos. R. Sapp, on premises. Flush bulks, glazing, slag roof, heating, electric lighting, hollow metal skylights, ventilators, painting, plumbing, plastering. Owner taking bids. E. Eyryng & Son, 800 S. 3rd street, Baltimore, are figuring.

Garages (48), Roseland place, west of Poplar Grove street, Baltimore Architect, private plans. Owner, S. J. Wohnenner, 1432 Whitelock street, Baltimore. Brick, 1 story, slag roof, electric lighting, cement

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

400 Guilford avenue, Baltimore. Changing present building to garage and blacksmith shop, cement floors, hollow metal skylights, roof ventilators. Contract awarded to R. B. Mason, 308 W. Madison street, Baltimore.

Church, 42nd street and Falls road, Baltimore, Md. Architect, J. Franklin Nelker, 330 N. Charles street, Baltimore. Owner, Trinity M. P. Church, on premises. Frame, 1 story, asphalt shingle roof, pipeless hot air heating, electric lighting, ventilators, painting, slate work, plumbing. Contract awarded to T. L. Jones & Son, 418 W. Saratoga street, Baltimore.

Residence (alt. and add.), 2934 St. Paul street, Baltimore. Architect, private plans. Owner, J. Marion Creamer, on premises. Brick, 2 stories, 18x45, composition roof, electric lighting, steam heating. Contract awarded to Price Construction Co., Maryland Trust Building, Baltimore.

Garage, Morton street near Oliver street, Baltimore, \$4,500. Architect, private plans. Owners, Chesapeake Coal Co., 1518

Maryland avenue, Baltimore. Brick, 1 story, slag roof, electric lighting, hollow metal skylights, roof ventilators, painting, plumbing. Contract awarded to J. J. Walsh & Sons, 1525 Maryland avenue, Baltimore.

Garage, N. C. R. R. and Union avenue, Woodberry, Md. Architect, private plans. Owners, Poole Eng. Co., on premises. Frame, 1 story, composition roof. Contract awarded to Hicks-Taso & Norris, 106 W. Madison street, Baltimore.

Garage, 714-16-18 S. Wolfe street, Baltimore, Md. Architect, private plans. Owner, Jos. Rutkowski, 735 Ann street, Baltimore, Md. Brick, 54x82, slag roof, electric lighting. Contract awarded to F. Hulsman, 833 S. Montford avenue, Baltimore.

Pump House, Falls road and Viaduct, Baltimore. Architect, private plans. Owner, Baltimore County Water Co., 100 W. Fayette street, Baltimore. Concrete and steel, 1 story, slag roof, electric lighting. Contract awarded to Price Construction Co., Maryland Trust Building, Baltimore.

Garage, Wakeling and Rising Sun avenue, \$425. George T. Sale (O), 1218 Penna. Building. H. A. L. Smink (C), 5320 N. 12th street. Frame, 1 story, 11x20 Cement floor.

Store and Dwelling, 2503 Mascher street, \$500. Bernard Smyth (O), Howard and Cumberland. Matthew Morrison (C), 2322 Howard street. Alterations and brick wall.

Dwelling, 1234 Ellsworth street, \$1,000. A. Giovannelli (O), 1234 Ellsworth street. E. Burwell, Jr. (C), 2056 S. 71st street. Brick 2 story, 16x18. Slag roof.

Garage, 5447 N. 6th street, \$630. J. F. Packard (O & C), 5447 N. 6th street. Alterations.

Wagon House and Shop, Emerald and Venango, \$3,000. J. J. Ratigan (O), 3622 Frankford avenue. Thomas Duff, 4666 Wyoming avenue. Brick, 2 story 36x26. Slag roof and alterations.

Store, 1323 Market street, \$800. Mastbaum Bros. & Fleisher (O), Finance Building. Basch Co. (C), 1420-36 S. Front. Flush bulk windows.

Store and Dwelling, 1808 Fairmount avenue, \$500. David Hudson (O), 2005 Fairmount avenue. S. J. Rea & Son (C), 1608 Fairmount avenue. Flush bulk and alterations.

Store and Dwelling, 174 Grape St., \$800. John Galla (O), 174 Grape street. A. Rowland (C), 4332 Pechin street. Flush bulk and alterations.

Factory, 4th and Somerset streets, \$670. Owen Osborne (O), 4th and Somerset streets. Stewart Bros. (C), 2526-28 N. Orkney street. Two triple steel sash.

Tank, Orchard and Unity streets, \$560. Wallace Wilson Hosliery Co., Orchard and Unity streets. Stewart Bros. (C). Tank support, 10,000 gallon house, tank on boiler house.

Office, American and Dauphin streets, \$500. Abram Cox Stove Co. (O & C), American and Dauphin streets. Elect brick and concrete flat on roof.

Dwelling, 6113 Woodland avenue, \$1,700. Anthony Grossi (O), 6113 Woodland avenue. Geo. S. Read (C), 6949 Saybrook avenue. Brick, 1 story, 16x13. Slag roof and alterations.

Storage, Robbins street and Bustleton pike, \$400. Andrew Peoples (O & C), 25th and Callowhill streets. Fire repairs.

Wash. Room, 4709 Lancaster avenue, \$6,000. E. W. Woolman (O), 4709 Lancaster avenue. J. F. Trent (C), 2041 Master street. Stone, 20x80, concrete roof under ground. Reinforced concrete.

Store and Dwelling, 5028 Germantown avenue, \$250. Alice Dushofsky (O), 5026 Germantown avenue. Philip Goodman (C), 2540 S. 3rd street. Brick 2nd story addition, 14x14. Slag roof.

Dwelling, 815 Kimball street, \$500. John Magaldi (O & C), 815 Kimball street. Brick 2nd and 3rd story addition. Slag roof.

Factory, 2411 Norris street, \$16,000. Standard Dental Mfg. Co. (O), 2411 Norris street. Philip Haiback Contg. Co. (C), 1261 N. 20th street. Brick, 1 story, 41x75. Slag roofing.

Dwelling, 6114 Girard avenue, \$1,200. John Hays (O), 6114 Girard avenue. J. D. Fisher, (O), 5424 Thompson. New Porch, 16x18. Tin roof and alterations.

Dwelling, 5326 Girard avenue, \$800. Geo. A. Jones (O), 5326 Girard avenue. J. D. Fisher (C), 5425 Thompson Altera-

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garages (5), 601-11 Courtland street, \$1,500. M. Marks (O & C), Brick, 1 story, 16x20. Slag roof.

Shed, 1332 Washington avenue, \$2,000. Penn Chemical Works (O), The Austin Co., Bulletin Building (O). Frame, 1 story, 48x83. Slag roof.

Restaurant, Juniper and Cherry streets, \$7,000. J. Walter Rosenberg (O), 151 S. Broad street. Albert Zellfelder (C), Broad and Walnut. Brick, 1 story, 32x60. Slag roof.

Store and Garage, 1901 Church street, \$4,000. H. Hirst (O), 4209 Wain street. Lewis Ahlery (C), 4433 Salmon street. Brick, 1 story 12x22. Slag roof. Brick, 1 story, 72x22. Slag roof.

Storage Building, Church lane and Germantown avenue, \$1,100. Blaisdell Pencil Co. (O), Berkly and Wayne. F. E. Aubel (C), 2503 Germantown. Iron on iron, 1 story, 18x58. Tin roof.

Warehouse, 23rd and Passyunk avenue, \$26,000. Burton C. Simon (O), 18th and Passyunk avenue. H. F. Dinkelacker, (C), 227 N. Farnon. Brick, 1 story, 64x190. Slag roof.

Warehouse, Morris and Bambrey, \$21,000. Chas. A. Shetzline (O), 2021 S.

Broad. H. F. Dinkelacker (C), 227 N. Farnon. Brick, 1 story 55x200. Slag roof.

Factory, State road and Robbin, \$8,000. Commercial Products Co. (O), 6322 N. Broad. Anton. Ahlers (C), 3425 Howell street. Brick, 1 story, 60x100. Slag roof.

Shed, 1615 N. 9th street, \$1,500. U. G. I. Co (O & C), Broad and Arca. Iron and iron, 1 story, 15x62. Slag roof.

Garage, 6315 Shesman street, \$450. Fred T. Doll (O), 6315 Sherman street (O). James W. Havelow (C), 7010 Saybrook avenue. Brick, 1 story, 12x18. Slag roof.

Garage, 319 N. 22nd street. \$525. Joseph Dzedzienski, 319 N. 22nd street (O).

A. Sieminski (C), 1634 Ruffner street. Alterations to brick wall.

Dwelling, Fox Chase road and Bustleton pike, \$800. Geo. Yelland (O), Anton Ahlers (C), 3425 Howell street. New porch, 34x35, 9 feet high.

Stores (2), 4207-09 Lancaster avenue, \$1,000. H. B. Powell, attorney (O), Lincoln Building. William A. Christy (C), 2202 S. Broad street. Fire repairs.

Boiler House, 2023 Hunting Park avenue, \$1,000. Link Belt Co. (O & C), 2023 Hunting Park avenue. Brick, 1 story, 15x25. Asphalt roof.

Store and Dwelling, 4901 N. Broad street, \$375. Jno. B. Aukerbrand (O), 4901 N. Broad street. Jno. S. Kline, (C), 3255 Woodland avenue. One bulk window and alterations.

Dwellings (2), Claridge and St. Vincent \$6,000. Peter Hassler (O), 2834 N. Lawrence. M. Stevens (C), 910 Fanshaw. Brick, 2 story, 15x40. Slag roof. Hot water heating.

Dwellings (3), 65th street, Upland, \$9,500. Rose Salasin (O), 2011 S. 13th street. S. Levin (C), 2020 S. 65th street. Brick, 2 story, 15x39. Slag roof, hot air heating.

Alterations and Additions

Factory, 311 N. Randolph street, \$4,000. Berks Bros. (O), 311 N. Randolph street. M. Yellin (C), 712 N. Franklin street. Brick, 2 story, 18x50. Slag roof addition.

Store, 1141 Bainbridge street, \$410. Meyer Levy (O), 1141 Bainbridge street. A. P. Lucker (C), 1721 N. 1st street. Install bulk and alterations.

Hospital Addition, 39th and Powelton streets, \$3,100. Presbyterian Hospital (O & C), 39th and Powelton streets. Brick, 2 story, 13x21. Tin roof.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

tions to store, metal ceiling and partition.
Dwelling, 239 Fairmount street, \$300. Morris Wecht (O and C), 237 Fairmount street. Interior alterations.

Dwelling, 706-08 North Twenty-third street, \$900. Sam Betterman (O), on premises. Nathan Litman (C), 2030 South Fifth street. New Flush bulk and alterations.

Store and Dwelling, 1734 South Second st., \$1800. Nathan Litman (O and C), 2030 S. Fifth street. Repair fire damage and new flush bulk.

Dwelling, 1237 West Silver street, \$300. Francis C. Detweiler (O), on premises. W. E. Stone (C), 2069 E. Dauphin street. Brick, 1 story, 6x12 feet, slag roof.

Store and Dwelling, 1026 Vine street, \$500. F. Fischer (O), Line Lexington. W. S. Hunsberger (C), 735 Cherry street. Repair fire damage.

Factory, 1213 Spring Garden streets, \$800. Falcon Pen Works (O), 1213 Spring Garden street. P. A. Sorenson (C), 1133 Callowhill street. Brick, 1 story, 14x17. Slag roof.

Garage, 6405 N. 11th street, \$800. L. Noudasher (O), 6405 N. 11th street. H. Hope (C), 5901 York road. Brick, 1 story, 12x20. Slate roof.

Dwelling, 1510 Diamond street, \$1,000. John J. Bannon (O), 1510 Diamond street. H. P. Werner (C), 3245 Germantown avenue. Alterations and new iron stairway.

Store, 709 N. Broad street, \$625. O. Isenberg (O), 203 N. Broad street. Lam Building Co. (C), 1001 Wood street. Flush bulk and new iron cellar door.

Dwelling, 3653 Calumet street, \$300. Mrs. John Murphy (O), 3653 Calumet street. John J. Hurley, 4416 Cressoff. Brick, 1 story, 12x16. Tin roof.

Factory, Allen and Erie avenue, \$50,000. S. P. Wetherill (O), Morris Building. Standard Construction Co. (C), 1713 Sansam street. Brick, 2 story, 84x99. Slag roof.

Dwelling, Medary and Park avenue, \$1,000. John Goldman (O), Medary and Park avenue. Harry R. Rust (C), 19 S. 8th street. build sleeping porch, 10x16.

Dwelling, 4547 York road, \$300. Mrs. Rose Trager (O), 4547 York road. J. Solomon (C), 1828 N. Franklin. Enclose front porch.

Dwelling, 184 W. Diamond street, \$400. Glen Oak Association (O), 184 W. Diamond street. Joseph Reis (C), 1331 N. Front streets. Brick, 1 story 12x12. Slag roof.

Freight Station, Cheltenham and Germantown avenues, \$3,570. Philadelphia and Reading Railway Co. (O & C), 12th and Market. Brick, 1 story, 25x30. Slate roof.

Garage, 512 N. 61st street, \$750. Chas. D. Heavey (O & C), 512 N. 61st street. Brick, 1 story, 35x20. Slag roof.

Dwelling, 6808 N. 11th street, \$400. D. R. Taylor (O), 6808 N. 11th street. James Spear Co. (C), 1823 Market street. New heater.

Garage, 1808 Pearl street, \$900. Mary O'Neill (O), 1809 Vine street. J. H. O'Neill (C), 1809 Vine street. Brick, 1 story, 30x16 and 21x18. Slag roof.

Feed Store, Marshall and Callowhill streets, \$1500. Chas. Hieber (O), Marshall and Callowhill streets. Philip Halback Construction Co. (C), 12161 N. 26th street. New store foundation and brick wall.

Store and Dwelling, 2615 W. Girard avenue, \$350. Bergdoll Estate (O), care of Chas. Miller, real estate agent, 1217 N. 29th

street. Frank O. Wintz (C), 1618 N. 27th street. Flush bulk and alterations.

Elevator, Fifth and Reed streets, \$2,000. Mt. Sinai Hospital (O), Fifth and Reed streets. Wm. Linker Co. (C), 831 Cherry street. Pent house on concrete roof.

Dwelling, 1117 Tree street, \$300. A. Campoelito (O), 1117 Tree street. F. W. W. Hardy Co. (C), 1228 Fitzwater. Brick, 1 story, 12x11. Slag roof.

Colonial Hotel (rear), 1102 Spruce street, \$1,500. D. W. Van Tine (O), 1936 N. Park avenue. Wil. Easterbrook (C), 146 N. 4th street. Brick 2nd story addition, 19x40.

Dwelling, 1000 Lindley avenue, \$1,000. Geo. Hes s(O), 1000 Lindley avenue. J. Y. Louv (C), 3731 York road. Alterations and a new porch.

Factory, 220-24 Wood street, \$5,000. Nelson J. Nickerson (O), 315 N. 3rd street. Royhouse Arey Co. (C), 112 N. Broad street. Reinforcing 3rd and 4th floors.

Garage, 3208 Woodland avenue, \$650. Geo. Wood (O), 626 Chestnut streets. H. A. Paxson (C), 6006 Market street. Alterations.

Factory, 312-20 W. Columbia, \$850. W. W. Lee agent (O), 1752 Frankford. Philadelphia Wood Working Co. (C), 312 W. Columbia. New stairway and alterations. Steam heating.

Dwelling, 1826 Arch street, \$900. W. W. Connolly (O) 1818 Arch street. Brownworth Co. (C), 1611 Sansom street. Fire escape.

Store and Dwelling, 506 S. 7th street, \$900. Frank Morandi (O), 506 S. 7th street. Antony Fate, 708 S. Randolph. Brick, 2 story, 12x8. Slag roof and alteration.

Garage, 603 W. Cayuga street, \$1,800. Frd. J. Wahle (O), 603 W. Cayuga street. H. Brockelhurst, 512 W. Norris. Brick, 1 story, 24x16. Slag roof.

Garage, 21st and Glenwood avenue, \$6,000. A. & J. J. Williams Co. (O), 22nd and York. H. E. Grau Co. (C), 1707 Sansom street. Brick, 1 story, 30x92. Tin roof.

Storage Building, 1709 S. Orianna street, \$900. Ishaal Mittin (O & C), 1710 E. Moyamensing avenue. Brick 2 story, 15x37. Slag roof.

Open shed, 14th and Thincum avenue, \$400. J. H. Hartell (O), 3214 Chestnut street. Le Roy L. Smith (C), 4007 Chester avenue. Open shed, 114x20. Rubberoid roof.

(Continued from Page 320.)

zied, though I spoke truthfully; but how could I do otherwise when I am puzzled myself?

Yes, it is indeed courageous of me to question you, but I believe in you, reverence your art, and honor your aims, if not your advertising ethics.

PERI SCOPE.

The answer to these questions may be found in the report of a committee appointed by the Board of the American Institute of Architects, presented first to the Board at its September meeting, and again at the convention held recently in Philadelphia.

The substance of this report is that advertising to excess is a question of bad taste; that

it is practically impossible to define and control matter of taste by legislation, and that it is better, therefore, to remove advertising from the list of punishable offense and revise the Canon of Ethics accordingly.

Proposals

Bonds. Improvements. Equipment.

As the Home Office and Headquarters of the Most Important Financial, Railroad, Engineering, Structural, Manufacturing and Equipment Firms in the United States, Pennsylvania offers a Particularly Rich and Productive Field for "Proposal" advertising. "The Builders' Guide" is the Only Medium in this Field.

DEPARTMENT OF COMMERCE, Office of the Superintendent, United States Coast and Geodetic Survey, Washington, D. C., May 20, 1918.—Sealed proposals will be opened at this office at 2 P. M., June 12, 1918, for the construction of a new building for the United States Coast and Geodetic Survey at Washington, D. C. Drawings and specifications may be obtained from this office in the discretion of the Superintendent. R. L. FARIS, Acting Superintendent, United States Coast and Geodetic Survey.

ONE WAY OF SECURING CONTRACTS.

A. Wiseman, an electrical contractor in California, was a hustler, and his work was a combination of good quality and reasonable prices. He had hundreds of competitors—or did when he decided to "label his work," but since then most of them have faded away (some of them, he writes, are now working for him), and what's the reason?

Well, he figured it out thus: Every contract he secures he puts a sign on to show the public that he is on the job; that it was only another structure he was wiring. One sign, plus good work and reasonable prices, enabled him to land another, and to-day it is a foregone conclusion that if anyone is going to have electrical work done A. Wiseman will have a chance at it.

Now take this home to yourself—be A. Wiseman in your community. No matter whether you supply the brick, the lumber, the mantels, the glass, the millwork, the roof or the waterproofing of the cellar—no matter whether you are the architect, the contractor, the stairbuilder or plumber, tell the passerby that you are "on the job"—that is, if you are proud enough of your work—willing that it or the material you are selling should bear inspection. There is nothing more dignified or elegant than these 2x3 feet signs manufactured by the Independent Printing Companies of U. S. at Washington, D. C., and which sell for about 15c. each. They are well made of flexible hemp fibre, better than cardboard, cloth or metal—not greasy, but absolutely weatherproof. A sample is obtainable upon request.

Independent Printing Companies of U. S., McLachlen Bank Building, Washington, D. C.

Our specialty is Portland Cement that will stick and pass the City Department. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

SALTING THE TAIL OF PROSPERITY

By Frank Adams Mitchell

Early last Spring I spent a week-end with Cousin George Sanders out at Pontiac. It was one of those near Spring days we have often experienced when I reached there on Saturday morning, and I spent the day with him driving around looking over the various jobs he had under way.

Cousin George is a building contractor and knows his business. He's a bluff, hearty individual of pronounced ways, a little bit too rough perhaps, but sturdy and dependable. He's not in the habit of talking for talk's sake or using many words when action is needed, and I think probably it's due to the direct compelling way he has that makes him so well liked and keeps him busy all the time.

I learned a lot during my stay, and in all modesty, I'm compelled to state that George picked up a little information from me which I believe he will use. At least he has shown hopeful symptoms.

At about three in the afternoon we got back to his office. It wasn't much of an office as offices go, as George isn't very strong on the chair warming stuff. I pulled out a cigar case, but George said, "No, this old jimmy pipe does me during the week and I save cigars for Sunday. You know I'm on the wing most of the time week days and anything that smokes goes out doors."

I got rather interested in building conditions in Pontiac, and took the occasion to absorb a little information to see how thoroughly George handles his business. I'd come to the conclusion that while he's busy all the time and has plenty of work on hand, there's a lot of loose ends which he could pull together, which would make this business a whole lot stronger.

"I say, George," said I, "What's your system for getting these building contracts?"

"System nothing," said George. "I don't have any system. They just sort of naturally drift into the office. Everybody hereabouts knows me and knows my work is on the A No. 1 order."

"You've got some competition here, I take it," said I.

"Well, yes, I've got considerably more than I would like to have. As a matter of fact, its getting now so a fellow has to sharpen his pencil to a pretty fine point to get some of these jobs. I've been in business so long here that I know just about where the limit is, and while estimating contracts is more or less a gamble, I've a hunch that I know as much about it as the next one and when I put in a bid it's about as low as I care to go."

"You admit then," said I, "that some of this business that bows into your office, as

you call it, flows right on through and that you really do have some difficulty now and then in getting it dammed up right here."

"There are some jobs that I've a chance on, but that's about all," said George. "You see George Smith over there is a pretty energetic young cuss and lately he's been getting some of the good jobs away from me. I can't quite figure it out and I don't understand how it is that he can spend so much on advertising and sending out these here follow-up letters and running around town calling on architects and business men and still have time left to handle his regular work."

"Impossible!" said I. "That's exactly how he does it. Hasn't it occurred to you that you may be spreading yourself out a little too thin? Perhaps you're taking a little too much of your time riding around over-seeing these jobs when you might be in your office dictating letters or out on the street looking up new business."

"Well I've never had to do it," replied George. "I've never had any trouble getting business until lately. All these fellows around town who have anything to do with building have sort of gotten into the habit of calling me up and giving me a chance to figure. I know them all pretty well, belong to two or three lodges so that I meet them in a friendly way, and do my initial work evenings that way."

"Now don't think I'm butting into your own affairs, George, but I've had some experience in the advertising game, and while I may be on the wrong track, something tells me I can give you a few hints which may or may not do your business some good. If you don't like my suggestions, you don't have to follow them and there's no harm done. If you think I can do you any good, I will be only too glad to be of some help. Now take for instance this proposition of advertising. Did you ever hear of Force?"

The other man acted as though he thought that had nothing to do with the case.

"Sure," said George, "that's a breakfast food as near as I can remember. Eight or ten years ago, Sunny Jim was staring you in the face from every street car ad, and we used to have it at the house regularly."

"Do you know George, that Force is still on the market?"

"No," replied he, "I don't know as I do." "It sure is," said I, "but there's not very much of it used for the simple and sufficient reason that the people putting out Force came to the conclusion some time ago that it didn't need to be advertised, and since the moment of that decision, their sales have fallen off. So that while everybody can buy

Force, nobody does because it isn't advertised."

"What's that got to do with my business?" remarked George.

"It's got a whole lot to do with it. That man Smith across the street you spoke about a minute ago may have got a hunch that a systematic correspondence course directed at the architects and business men would educate them to the importance of doing business with him, and whether you think so or not, I've a notion that the reason his business is cutting into yours is because he's adopted the principle of keeping everlastingly at them so they don't have a chance to forget that he's in the building game. Did you ever do any advertising?"

"Sure," said George. "A couple of years ago I put an ad in the daily paper which cost me \$14."

"Just once?" said I.

"Once was enough," answered George. "I didn't get anything out of it and didn't see any reason for throwing time and money away that way."

"I hate to man-handle you," said I, "but you need to be shaken up and have a little twentieth century business common sense injected into your system. Of course, you didn't get anything out of one ad. You couldn't. That isn't the way advertising brings results. What you should have done was to have spent about \$300 or \$400 in advertising, by doing some general letter writing and sending out some folders."

I picked up an old paper on George's desk and took it over casually. Sure enough I found what I expected. One of George Smith's ads.

"This man Smith seems to have anticipated my suggestions to you. Does he do much of this?"

"Yes," said George. "He seems to be spending his money like a drunken sailor. Why that's the tenth ad he's had in that paper during the past month or so. I bet he doesn't make a cent because he's putting it all in advertising."

"That's all right," said I, "perhaps he doesn't intend to make a cent for the time being. Maybe his policy is to get his business by the well established method of advertising. Then he'll let down a little, but don't you think he'll stop entirely. He'll have the advertising bug strong after it brings results, and the only way it brings results is to keep at it. No suppose you started in the same way, don't you honestly think that people would begin to wonder if George Sanders hadn't really taken a new lease on life and gotten a little perspective?"

"Well, I'll admit for the sake of argument," said George, "that if I do some advertising, it would probably make business better, but I doubt if it would make it enough better to take care of the additional expense, and honestly I've been afraid to tackle it."

(Continued Next Week.)

Reference Directory for Architects, Builders and Owners

- Artesian Wells.**
 Artesian Well Drilling Co.,
 Real Estate Trust Bldg., Phila.
 Ridpath & Potter Co.....Bourse Bldg., Phila.
 John B. Rulon.....1355 Colwyn st., Phila.
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 F. Weber & Co.....1125 Chestnut st., Phila.
- Blue Print Paper.**
 Chas. H. Robbins.....125 S. 11th st., Phila.
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- Brick Renovating.**
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- Builders.**
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 Mitchell Bros.....2185 Race st., Phila.
 Pomeroy Const. Co.....1609 Rinestead st., Phila.
- Builders' Supplies.**
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Reserve for Losses	-	4,419,000.00
Reserve for Taxes	-	950,000.00
Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
Losses Paid Since Organization	-	192,518,273.33

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Vol. XXXIII., No. 22
May 29, 1918

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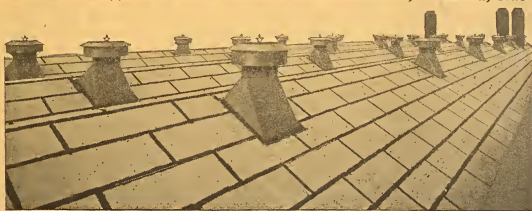
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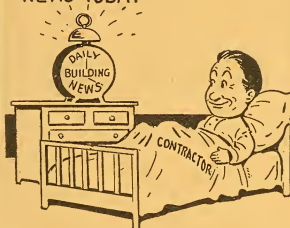


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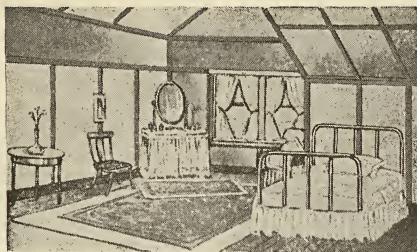
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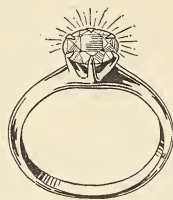
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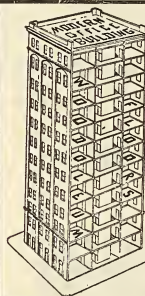
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VOLUME XXXIII
Number 22

PHILADELPHIA
May 29, 1918

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As The Editor Sees It



IN an address before the fifty-first annual convention of the American Institute of Architects Mr. Frederick L. Ackerman presented a very practical side of the industrial problems now confronting the architects of America. He said:

"* * * There is one tremendously important element missing in our program of preparation and that element is the hope of labor for a better condition of peace. Make such a hope vivid to the men who work and American labor will become stable. Ignore it and the restlessness will increase.

"Within our field of interest a vivid hope would be expressed in decent homes, in slumless cities—in a word, in an adequate environment. It is our problem; it is our obligation to make such a hope a reality. But to make this hope a reality we must extend our field of vision; the problem of housing and town planning must be conceived in broader terms; the mere ability to design pleasing cottages will not serve the purpose. Our narrowly conceived personal efforts, or much heralded private enterprise, will not serve for we shall be confronted with a national problem involving international values..

"But what does this mean in definite terms of action? It means that we must establish totally new standards in the framing of legislation; that we must establish a complete new system of mobilizing credit. What is the sense of limiting the use of state funds to such fields of collective action as provision for the erec-

tion of poor-houses, houses of correction, jails and hospitals for the insane, while we permit loaning corporations to use our collective capital in such a way as to develop the social, moral and physical diseases which fill these public institutions to overflowing. It means that we must so organize the state that wealth, that capital, that credit shall also be used for the purpose of preventing those diseases."

The financial side of this problem is a very complex one and can be solved in a number of ways. We have at various times printed accounts of the methods which have been employed in foreign countries to finance housing schemes.

One of the most interesting ideas in this realm is that of "Co-partnership Housing" which was inaugurated in London in 1901. To-day the number of co-partnership societies throughout England, Scotland and Wales is about sixty.

In reference to this sort of scheme Mr. Herbert S. Swan, in the Journal of the American Institute of Architects, says: "The houses are not built for any particular class of people. An endeavor is made to provide different types of houses which will meet the wants, not only of the working class, but of a considerable range of persons."

In a co-partnership society the tenant does not become the owner of the house he lives in. In lieu of acquiring the deed to a particular house and lot he pays a given amount of capital into the society. In other words, the members of the so-

ciety collectively own all the real property in the community. As J. S. Nettlefold puts it, "No member can say, 'This house is mine.' They can all say, 'These houses are ours.'"

In a non-partnership society one must either buy a house or rent it. If one rents he is still, even after many years' payment of rent, only a tenant, and the house still belongs to the landlord. If one buys and is later compelled to move, he all too often leaves an unsalable home behind him. In a co-partnership society one can acquire the value of a home without curtailing his mobility, as his investment, if not always transferable without loss, will at least net him as much income as any other safe property.

Co-partnership in housing is an attempt to combine the advantages of both tenancy and ownership of houses. The interests of tenant and investor are harmonized by an equitable use of the profit arising from increased values and the careful use of property.

The following is a brief summary of the advantages claimed for co-partnership housing, as taken from Mr. Swan's address:

1. The tenant gets a house at a rental which, if internal accommodations and external surroundings are compared with what is obtainable at most places, is less than he would have to pay elsewhere for the same accommodations.

2. He secures freedom from loss on his savings should circumstances require him to leave the neighborhood.

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3. The capital for building his house is provided at a cheaper rate than it could be obtained on any other system that is commercially sound.

4. Should values go up, he gets the benefit, either by way of a dividend on his rent or by paying a rental which is below the market value.

5. He secures practically all surplus profit after the fixed charges have been met.

6. The benefit of the "unearned increment," if any, accrues to the tenants, and not to a ground landlord who has no interest either in the tenants or the neighborhood.

7. The tenants as a whole can gradually relieve themselves of dependence on outside capital altogether by accumulation of their own savings. By gradual process, therefore, it lies with the tenants to transfer the ownership from non-tenant shareholders who take the main risk to begin with, to tenant shareholders, who, it is hoped, may collectively become the ultimate owners.

8. He can invest at 5 per cent., in the society of which he is a tenant, any savings he finds it possible to make out of his earnings.

9. He gets his house, with a small garden attached, in a neighborhood where there is plenty of fresh air, and the house itself is one with some individuality in which a tenant can take a pride, instead of being an insignificant unit in an interminable row of jerry-built ugliness.

10. He secures a social atmosphere which awakens new interests and creates a collective friendship unknown under the individual system of ownership.

A more detailed account of this scheme for financing an individual housing community is not possible here, but it is well worth the study of all interested in this problem now confronting us.

The earnestness of purpose with which architects are accepting the burden of solution of this problem speaks well for the outcome, and with the experience of other countries before us there is every reason to hope that America will surpass all previous efforts and give to the world lasting and adequate Industrial Housing Developments.

THE conference called by the American Institute of Architects for June 7th, in New York, for the purpose of considering present and future conditions in the building industry of the United States, has been postponed until one week later, and will be held on June 14th at 10 A. M., in the Engineering Societies Building, Assembly Room No. 2, 25 West 39th Street, New York.

The postponement is caused by a confusion of dates on the part of the managers of the Engineering Building and in appreciation of the co-operation already

shown by the managers of the building, the Institute has agreed to waive its claims and to accept the later date, June 14th.

THOMAS R. KIMBALL,
President.

WHAT IS A CARPENTER?

In the rush to build the big army cantonments, almost any man who claimed to be a carpenter was given a try-out. Prof. N. B. Garver, in a recent paper before the Western Society of Engineers, related some of the human interest items in this connection. He said:

"All classes were present and most of them claimed to be carpenters. If a collection were made of all obsolete, rusted out and worn out tools brought to the camp site, the collector would have a good start in the junk business.

"Most of the men belonged to the class called 'floaters.' Some of them were good mechanics; most of them were very ordinary workmen. If a man showed even ordinary ability and had any energy whatsoever, he was retained. The work was to be done, and if good workmen could not be secured the poor must be endured. The word 'economy' does not appear in the war dictionary.

"The following incidents are related to indicate the character and skill of the workmen: A carpenter (?) was seen crawling around on his hands and knees on the second floor joists. He was afraid to stand for fear he would fall.

"A carpenter (?) distributed wainscoting along the outside of the building and thought it was drop siding.

"Foreman Deggs said to a new carpenter as he came on the job, 'Are you a mechanic?' 'No,' was the reply, 'I am an Italian.'

"Foreman Price told a new carpenter to get out on the scaffold and help put on siding. The carpenter asked, 'What tools will I need?' Price's reply was, 'I don't know what tools you need, but I generally use a pick and shovel.'

"A laborer was discharged because his services were of no value. He went to another part of the camp and secured employment as a carpenter. In a few days he was advanced to the position of sub-foreman. He evidently had missed his calling in the first instance.

"Attention was attracted to a certain carpenter foreman because he was advancing laborers to the rank of carpenters. Upon investigation it was discovered that he was getting a 'bonus' of five dollars a week from each man thus advanced.

"The foreman of a gang of about 20 carpenters refused to have his gang divided. His method of protest was to sit down and do nothing. He and those of his men who refused to work were promptly discharged.

"Men who began work as carpenters often were reduced to laborers.

"Labor conditions on such work surely are not what might be desired, but the work must be done, and with the class of labor available."

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently, "but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectually than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

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Garage, Thirty-sixth and Gray's Ferry Road, Philadelphia. Architect, H. P. Friend, Inc., Boyer Arcade, Norristown, Pa. Owners, D. B. Martin Co., Thirtieth and Market streets, Philadelphia. Brick, 1 story, 50x150 feet, composition roof, cement floor, rolled steel skylights and sash, ventilators. Architects are taking sub-bids.

Residence and Garage, Lincoln Drive and Carpenter street, Germantown. Architects, Druckenmiller & Williams, 1527 Chestnut street. Owner, Dr. B. R. Simon, Eighth and Market streets, Philadelphia. Stone, stucco and brick, 2 stories, 32x66 feet, wing 34x13 feet, and 2 stories, 25x35 feet, slate roof, hot water or vapor heating, electric lighting, tile work, hardwood and cement floors. Plans in progress. Architects will take bids in ten days.

School (alt. and add.) (Fire Tower), Seventeenth and Ritzer streets. Architect, E. F. Durang, 1220 Locust street, Philadelphia. Owners, St. Monica's R. C. Church, care of Rev. J. J. Walsh, on premises. Stone, third story addition, 24x16 feet and 14x30 feet. Architect taking approximate bids, due as soon as possible. Wm. R. Dougherty, 1610 Sansom street, is figuring.

Restaurant, Tacony, Philadelphia. Architect, private plans. Owners, Tacony Ordnance Corp., Tacony, Philadelphia. Frame, 1 story, 60x90 feet, slag roof, cement floor, electric lighting. Owners will build.

Store Building, 232-34 North Fifteenth street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner's name withheld. Brick (slow burning construction), 2 stories, 40x120 feet, slag roof, stone foundations, electric lighting, tile work, hollow metal skylights, fire doors, pine and composition floors, metal lath, elevators, metal ceilings (heating reserved). Architect taking bids, due as soon as possible. D. Henwood, 1509 Wood street, additional bidder.

Store (alt. and add.), Fifty-second and Market streets, Philadelphia. Architect, H. E. DeHoff, 48 South Sixty-first street, Philadelphia. Owner, F. J. Loughran, 5201 Market street, Philadelphia. Brick, 2 stories, 14x18 feet, slag roof, stone foundations, steam heating, electric lighting, tile and marble work, cement and pine floors, metal lath, metal ceilings, ornamental iron work. Architect taking bids. Smith-Hardican Co., 1606 Cherry street, is figuring.

Garage and Service Building, Germantown avenue and Van Horn street. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owners, Willis-Winchester Co. and Simon Weil, 1001 Chestnut street. Brick and steel, 1 story, 80x140 feet, composition roof, steam heating, electric lighting, hollow metal skylights, slag and concrete floors, stone foundations. Architect has received bids.

Houses (111), Twenty-eighth and Dickinson streets, Philadelphia. Architect, private plans. Owners, Emergency Fleet Corporation,

136 South Sixteenth street, Philadelphia. Brick, 2 stories, 16x30 feet, slag roof, pine and cement floors, hot air heating, electric lighting. Owners taking bids. Burton C. Simon, Nineteenth and Passyunk avenue, and John W. Hughes, care of Buck & Gallagher, Twenty-fifth and Morris streets, are figuring.

Transformer House, Eightieth and Eastwick avenue, Philadelphia, \$30,000. Architect, private plans. Owners, P. R. T. Co., Eighth and Dauphin streets, Philadelphia. Brick, steel and concrete, slag roof, cement floors, electric lighting, rolled steel sash. Work about to be started.

Store Building (alts.), 1654 Ridge avenue, Philadelphia. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner, Leighton McMullin, 1652 Ridge avenue, Philadelphia. General interior alterations, brick work, hollow metal skylights, electric lighting, plumbing, cement floor in basement, maple and hardwood floors, millwork partitions, 1 elevator, stairways, flush bulks, ornamental iron work (lighting fixtures and steam heating reserved). Architect has received bids.

School Building, Thirtieth and Dickinson streets, Philadelphia. Architects, E. F. Durang & Sons Co., 1220 Locust street, Philadelphia. Owners, St. Gabriel's R. C. Church, care of Rev. James A. Holahan, Twenty-ninth and Dickinson streets, Philadelphia. Port Deposit granite, 3 stories, 60x112 feet, slate roof, stone foundations, steam heating, electric lighting. Architects taking bids, due June 4th. The following are figuring: Wm. J. McShane, 417 South Thirteenth street; Wm. R. Dougherty, 1610 Sansom street; Jacob Myers & Sons Co., Witherspoon Building; Roger Atkinson, Builders' Exchange; H. E. Baton, 1713 Sansom street; Cramp & Co., Denekla Building, and Sutton & Stephenson, 1317 Washington avenue.

Punch Press Building, State Road and Howell street, Philadelphia. Architect, private plans. Owners, Super Glass Co., 3400 Disston street, Tacony, Philadelphia. Brick and steel, 1 story, 25x25 feet, asbestos roof, concrete floors, stone foundations. Owners taking bids, due as soon as possible. F. W. Van Loon, Denekla Building, and Wark Yardley Co., 1737 Filbert street; Connec Const. Co., 1737 Filbert street, are figuring.

Residence (alts. and add.), 37 West Duval street, Germantown. Architect, C. H. Wilson, 1931 North Twenty-second street, Philadelphia. Owner, Joseph C. Foster, on premises. Consists of rear addition, changing stairways, etc. Brick, 2 stories, 9x18 feet, tin roof, combination fixtures, plumbing, porch. Architect taking bids, due as soon as possible. Wm. J. Gruhler & Co., 219 East High street, and J. E. Tourison, 7014 Boyer street, are figuring.

Garage, Thirteenth street, near Oak Lane avenue, Oak Lane, Philadelphia. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owner, C. E. Doan, Sedgwick, Pa. Stone, 2 stories, 26x25 feet, shingle roof,

stone foundations, hot water heating, electric ngating, cement and yellow pine floors. Architect taking bids, due as soon as possible. Thos. C. Trafford, 1613 Sansom street, and Hogg Const. Co., 1634 Sansom street, are figuring.

Garage, Sixty-fourth and Overbrook avenue, Philadelphia. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owner, John Isatz, on premises. Stone, 2 stories, 36x25½ feet, tile roof, cement and yellow pine floors, heating extension, electric lighting, plumbing. Architect taking bids, due as soon as possible. Milton W. Young, Overbrook, Pa., is figuring.

Store and Dwelling (alts.), 815 South Second street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, H. Plotnick, care of architect. Brick, 3 stories, 17x58 feet, general remodeling, slag roof, tile floors, hot water heating, electric fixtures, marble work, flush bulks, metal ceilings, cabinet work. Architect is ready for general bids.

Apartments (5), southeast corner of Twentieth and Ontario streets. Architect, private plans. Owner, C. Bradford Sigler, 2263 N. Twenty-first street, Philadelphia. Brick, 2 and 3 stories, 103x29 feet, slag roof, hardwood floors, tile and marble work (heating and lighting reserved). Owners taking bids, due May 31st. H. H. Weinberger, 509 West Cumberland street, is figuring.

Residences and Garages (2), Eighty-eighth and Eastwick avenue, \$6,100. Architect, private plans. Owner, John Schultz, on premises. Brick and hollow tile, 2 and 1 stories, 14x40 feet and 11x17 feet, slag roof, stone foundations, hot air heating, electric lighting, hardwood floors, hollow tile. Owner will build.

Garage, Forty-second and Spruce streets, Philadelphia. Architect, Geo. S. Idell, 34 S. Sixteenth street, Philadelphia. Owner, Mrs. Walderson, care of architect. Brick, 1 story, 19x11 feet, slag roof, cement floor, electric lighting. Plans completed. Architect ready for bids.

Garage, Fox Chase, Philadelphia. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owner's name withheld. Brick, 1 story, 130x40 feet, slag roof, stone and brick foundations, hot water heating, electric lighting, cement floors, gasoline storage system. Plans completed. Will take bids in a few days.

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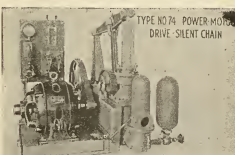
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Recreation Park, Fifty-seventh and Haverford avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, City of Philadelphia, Board of Recreation, 587 City Hall. Cement coping, iron fence and gates, wire screen, brick work, blue stone curb (plumbing separate bids). Contract awarded to Robbins Const. Co., Lafayette Building. Item No. 1, \$6,228; No. 2, \$6,445.

Station "D," Arch and Mascher streets, Philadelphia. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Philadelphia Electric Co., 1001 Chestnut street, Philadelphia. Brick, steel and stone, 1 story, 20x44 feet, slag roof, stone foundations, cement floors, safety treads, roof ventilators (lighting reserved). Contract awarded to Chas. Gilpin, Harrison Building, Philadelphia.

Residence, 1630 North Franklin street, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Samuel Englander, Crozer Building, Philadelphia. New bath room, plastering, plumbing. Contract awarded to Specht & Sperry, Heed Building, Philadelphia.

Factory (alt. and add.), 5119 Stiles street, Philadelphia, \$16,000. Architect, E. Gibson, 220 West Forty-second street, New York City. Owners, Dentists' Supply Co., 220 West Forty-second street, New York City. Consists of remodeling present building, 3 and 2 stories, 98x37 feet, and addition, brick, 3 stories, 49x21 feet, and 1 story, 11x13 feet, slag roof, stone and concrete foundations, yellow pine and reinforced concrete floors, steam heat (lighting reserved), hollow tile, millwork, hollow metal skylights. Contract awarded to Contract awarded to P. Haibach Const. Co., Twenty-sixth and Thompson streets.

Factory (add.), Tulip and Bleigh streets, Philadelphia, \$7,000. Architect, H. C. Eisenbise, Pennsylvania Building, Philadelphia. Owners, L. H. Gilmore Co., on premises.

Brick, 1 story, 100x90 feet, slag roof, cement floor, electric light. Contract awarded to H. C. Eisenbise, Pennsylvania Building, Philadelphia.

Wagon Shed, Delaware avenue and Westmoreland street, \$4,000. Architect, private plans. Owners, Pearson & Ludascher, on premises. Brick, 1 story, 60x28 feet, slag roof, stone foundations, cement floor, electric lighting. Contract awarded to Harry G. Evans, 1417 North Warnock street.

Recreation Park, Front and Allen streets, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, City of Philadelphia, Board of Recreation, 587 City Hall. Demolition, grading, iron fences and gates, cement coping, plumbing. Contract awarded to Wm. A. Mundy, 228 South Alder street, Philadelphia. Item No. 1, \$1,420; item No. 2, \$5,339.

Foundations for Smithery, Spec. 3015, Navy Yard, Philadelphia, \$33,000. Architect, private plans. Owners, U. S. Government, care of C. R. O'Leary, Navy Yard, Philadelphia. Reinforced concrete, concrete foundations and piles for machines and equipment, timber piles, waterproofing. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building.

Storage House (add.), Mill and Race streets, Philadelphia, \$10,000. Architect, private plans. Owners, Summerdale Dyeing, Print and Tin Works, Inc., Mill and Race streets, Philadelphia. Brick, 1 story, 47x103 feet, slag roof, stone foundations, electric lighting, cement floors. Contract awarded to J. A. Hand, 8029 Frankford avenue, Philadelphia.

Warehouse, 927-31 North Front street, Philadelphia, \$3,000. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner, Simon Weil, 831 North Third street, Philadelphia. Brick enclosed stairway and alterations. Contract awarded to Robbins Const. Co., Lafayette Building.

Garage, 1153 South Hicks street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, John Shea, 1414 Christian street, Philadelphia. Brick, 2 stories, 16x34 feet, slag roof, cement and yellow pine floors, stone foundations, gas lighting, skylights, sliding doors. Contract awarded to Dominic Iore, 519 Christian street, Philadelphia.

Residence (alts. and add.), 6362 Drexel Road, Philadelphia. Architect, Hancock & Hokanson, Bailey Building, Philadelphia. Owner, Wm. Fleck, care of Fleck Bros. Co., 44 North Fifth street, Philadelphia. Brick addition, living room, new bath and dining room, steam heating, electric lighting, tile work, hardwood floors. Contract awarded to Geo. Roberts, Glenside, Pa.

Building (alts.), 134 South Second street, Philadelphia. Architect, private plans. Owners, U. S. Government, Treasury Department, care of Appraisers, Philadelphia. Brick, 6 stories, 100x150 feet, electric lighting, steam heating, mill work, stone work, painting, plumbing and glazing. Contract awarded to W. O. Springer, 1624 Latimer street, \$4,923, 90 days.

Factory, Margaret and Bermuda streets, Philadelphia, \$40,000. Architect, private plans. Owners, the Barrett Co., on premises. Reinforced concrete and brick, 80 feet high, 100x150 feet, slag roof, concrete floors, rolled steel sash and skylights, fire doors (heating and lighting reserved). Contract awarded to A. R. Raff Const. Co., 1616 Thompson street.

Residence (alts. and add.), 608 Cliveden street, Philadelphia, \$4,000. Architect, Addison H. Savory, Stephen Girard Building, Philadelphia. Owner, Harrison I. Potts, on premises. Consists of interior and exterior alterations, front and rear porches, balconies, slag, tin and canvas roof, cement work, structural steel, plumbing. Contract awarded to Wm. C. Wright, 22 Harvey street, Philadelphia.

Power House and (2) Transformer Houses, Spec. 2952, Navy Yard, Philadelphia, \$130,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel and reinforced concrete, 2 and 1 stories, 15x37 feet and (2) 30x16 feet, slate roofs, electric lighting, rolled steel sash, fire and hollow metal doors, hollow

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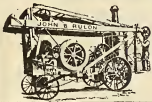
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PENNSYLVANIA Construction News

Freight House and Office, Coatesville, Pa. Architect, Samuel T. Wagner, Reading Terminal Philadelphia. Owners, Philadelphia and Reading R. R. Co., Philadelphia. Brick and steel, 2 stories, 22x40 feet, 30x98 feet and 30x195 feet, Johns-Manville roof, hot water heating, electric lighting, hollow metal sash, fire and metal doors, cement floors. Owners taking bids, due June 1st. F. W. Van Loon, Deneka Building; A. L. Carhart, Penfield Building; F. A. Havens Co., 845 North Nineteenth street; J. Sims Wilson Co., 1125 Brown street; Pomerooy Construction Co., 1609 Ransstead street; H. E. Baton, 1713 Sansom street, and F. W. Mark Cont. Co., Finance Building, all of Philadelphia, are figuring.

Residence, Jeffersonville, Pa. Architect, Dr. Chauncey G. Helick, Sixteenth and Oxford streets, Philadelphia. Owner, George W. Heuer, Jeffersonville, Pa. Stone, 2½ stories, 35x50 feet, tin roof, hardwood floors, hot air heating, electric lighting, tile work. Plans completed. Architect taking sub-bids on all lines.

Barn, Torresdale, Pa. Architects, H. W. Castor & S. B. Lewis, Stephen Girard Building, Philadelphia. Owner, W. T. Tonner, Torresdale, Pa. Frame, 1 story, cement work, concrete foundations. Architects taking sub-bids. Group of farm buildings contemplated. Too early for details. Sketches being drawn.

Residences (50) (Workingmen's Homes), Bethlehem, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, frame, stucco and concrete, 2 stories, 16x34 feet and 16x36 feet, slate and composition roof, yellow pine floors, hot water and hot air heating, combination and electric lighting. Plans in progress.

Residence (alts.), Ardmore, Pa. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owner, Edward T. Ross, Ardmore, Pa. New bath rooms, tile work, plumbing, electric work. Frank H. Mahan, Ardmore, Pa., is taking sub-bids.

Restaurant (add.), Chester, Pa. Architect, J. F. Lovering, Chester, Pa. Owners, Hassis Brothers, Chester, Pa. Brick, 2 stories, 20x100 feet, hot water heating, electric lighting. Plans completed. Owners are taking sub-bids.

Apartment House, Eddystone, Pa. Architect not selected. Owner, Geo. A. Johnson, Eddystone, Pa. Work contemplated. Too early for details.

Store (alt. and add.), Allentown, Pa. Architect, private plans. Owner, Frank Paterniti, 609 Tilghman street, Allentown, Pa. Brick, 3 stories, carpentry, plastering, plumbing, steam heating, electric lighting, flush bulks. Plans in progress.

Blower House, South Bethlehem, Pa. Architect, private plans. Owners, Bethlehem Steel Co., South Bethlehem, Pa. Brick, 1 story, 25x40 feet, slag roof, cement floors, rolled steel sash. Owners about ready for bids.

Bridge, Lynnpport, Pa. Engineer, Tilghman Moyer, Allentown, Pa. Owners, Lehigh County Commissioners, Court House, Allentown, Pa. Reinforced concrete and steel, 95 feet long. Plans in progress. Owners will take bids in one week.

Residence, Bethlehem, Pa. Architect, private plans. Owner, Mr. Benner, Bethlehem, Pa. Brick, 2½ stories, 30x32 feet, slate roof, hot water or steam heating, electric lighting, pine floors. Plans about completed.

Residence (alts. and add.), Willow Grove, Pa. Architect, Walter H. Thomas, 134 South Fifteenth street, Philadelphia. Owner, W. W. Justice, Boyers Corner, Pa. Stone and brick, 2½ stories, various sizes, stone foundations, tin roof, oak floors (heating and lighting reserved). Architect taking bids, due June 3rd. Frank E. Wallace, 1220 Chancellor street; Wm. J. Gruhler & Co., 219 East High street; W. John Stevens, Inc., Wynecote, Pa., and Alfred James, Balta, Pa., are figuring.

Almshouse (alts. and add.), York, Pa. Architect, Robert A. Stair, Jr., York, Pa. Owners, Poor Board, care of secretary, York, Pa. Brick, 4 stories, 135x150 feet, slate roof, steam heating, electric lighting, tile work, fire doors, metal lath. Owners taking bids, due June 14th. Geo. Gilbert, Samuel Glatfelter, J. L. Menough, C. A. Boyer, and Hess Bros., all of York, Pa., are figuring.

Garage, Marietta, Pa. Architect, Granville Paules, Columbia, Pa. Owner, J. M. Reich, Marietta, Pa. Brick, 1 story, 50x100 feet, composition roof, concrete floors. Architect

taking bids. F. W. Paules, I. P. Ferguson, and E. K. Lockard, all of Columbia, Pa., are figuring.

Machine Shop and Office, Rutherford, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete and brick, 1 story, 175x50 feet and 41x20 feet, asbestos roof, cement, pine and mastic floors, electric lighting, rolled steel sash and skylights, fire doors, ornamental iron work, roof ventilators, asbestos roof from Machine Shop to Engine House, 65x20 feet. Owners taking bids, due June 5th. H. E. Baton, 1713 Sansom street; F. A. Havens Co., 845 North Nineteenth street; F. W. Van Loon, Deneka Building, Philadelphia, and A. L. Carhart, Penfield Building, are figuring.

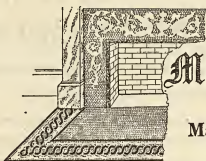
Apartment Houses (2), Ardmore, Pa. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owner, H. O. Keener, 3015 Chestnut street, Philadelphia. Brick, 3 stories (6 family), slag roof. Plans in progress. Too early for details. Will take place of 8 residences.

Dairy House, Stock Buildings, Silos, Etc., Torresdale, Pa. Architects, Horace W. Castor & S. B. Lewis, Stephen Girard Building, Philadelphia. Owner, W. T. Tonner, Torresdale, Pa. Frame, 1 story, concrete foundations, cement work. Plans in progress. Owner will be ready for sub-bids in about one week.

School, Greenland, Pa. Architect, Malvern Evans, Lancaster, Pa. Owners, School Board of East Lampeter Township, Lampeter Township, Pa. Brick, 1 story, 35x40 feet, slate roof, pine floors. Contract awarded to Mr. Eckman, Bird-in-Hand, Pa.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

If you want Trap Rock or Slag, any size or grit, we are headquarters for same. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.



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NEW JERSEY Construction News

Warehouse (alts.), Trenton, N. J. Architect, Wm. Kleeman, Trenton, N. J. Owner, Alex. Klinkowstein, Trenton, N. J. Brick, 3 stories, 30x80 feet, slag roof, cement floors, electric lighting. Plans in progress.

School, Julietstown, Burlington County, N. J., \$7,000. Architect, Harry Hill, Trenton, N. J. Owners, School Board of Julietstown Township, care of Frank Bosworth, Clerk, R. F. D., Burlington, N. J. Frame, 1 story, 75x40 feet, Waterbury heaters, pine floors. Owners taking bids. J. S. Rogers Co., Moorestown, N. J.; Lewis C. Mathis, Medford, N. J.; Geo. W. Shaner & Son, Palmyra, N. J., and Mr. Suttis, Browns Mills, N. J.; Harry Hilton, Trenton, N. J., are figuring.

Office Building (add.), Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick and concrete, 2 stories, 2 wings, 60x40 feet, slag roof, pine floors, steam heating, electric lighting, metal lath. Contract awarded to Doyle & Co., 1519 Sanson street, Philadelphia.

Signal Tower and Battery House, Manville Junction, N. J. Architect, Sannet T. Wagner, Twelfth and Market streets, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Brick, steel and stone, 2 stories, 15x26 feet and 18x34 feet, slag roof, asbestos shingle roof, concrete floors, hot water heating, electric lighting, fire and hollow metal doors, iron stairs, concrete floors, ornamental iron work, roof ventilators. Owners taking bids, due June 4th. Wark-Yardley Co., 1737 Filbert street; H. E. Baton, 1713 Sanson street; Thos. C. Trafford, 1613 Sanson street; F. W. Van Loon, Donkha Building, and A. L. Carhart, Penfield Building, are figuring.

Magazine Buildings (10), Spec. 2927, Lake Denmark, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Washington, D. C., care of Bureau of Yards and Docks, Navy Department, Stueco, brick and steel, 1 story, 198x50 feet, asbestos shingle roof, asphalt, mastic and composition floors, electric lighting, rolled steel sash, fire doors, hollow tile, roof ventilators, waterproofing, damp-proofing. Owners taking bids, due June 1st. F. W. Mark Const. Co., Finance Building, Philadelphia, is figuring.

Power Plant and Repair Shop (alts. and add.), McAfee, N. J. Architect, private plans. Owners, Bethlehem Steel Corp., Bethlehem, Pa. Brick, concrete and steel, 1 story, 20x30 feet and 13x13 feet, gypsum tile roof, concrete floors, electric lighting, roof ventilators, metal window guards, wire work, ornamental iron work. Owners taking bids, due May 29th. Pomeroy Const. Co., 1609 Ranstead street, Philadelphia, are figuring.

Forge Shop, Building "N," Camden, N. J. (1394C). Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Brick, slow burning construction, 1 story, 45x55 feet, slag roof, concrete floors. Owners taking bids, due as soon as possible. Wm. R. Dougherty, 1610 Sanson street, Philadelphia, is figuring.

Plate and Angle Shop, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Structural steel, 600x200x100 feet high, rolled steel sash and skylights, composition roof, cement and concrete work, electric lighting. Owners taking bids, due as soon as possible. J. S. Rogers, Moorestown, N. J.; Mockett Const. Co., Camden, N. J.; Doyle & Co., 1634 Sanson street, Philadelphia; Fraser-Brace Co., 1328 Broadway, New York City, and Holbrook, Cabot & Rollins Corp., 52 Vanderbilt avenue, New York City, are figuring.

Store (alts.), 1132-34 Broadway, Camden, N. J. Architects, Moffett & Stewart, Camden, N. J. Owner, Howard Lee, on premises. Brick, 1 story, general interior alterations (heating and lighting reserved), flush bulks. Architects taking bids, due May 31st. Wm. Draper, L. T. West, Mockett Const. Co., and Geo. Bachman, all of Camden, N. J., are figuring.

Hotel and Store, Mt. Vernon and Haddon avenues, Camden, N. J. Architect, private plans. Owner, Frank Wisniewski, 1039 Haddon avenue, Camden, N. J. Brick, 3 stories, slag roof, pine floors, electric lighting. Owner taking bids. Mockett Const. Co., Camden, N. J., is figuring.

School (add.), Deerfield Township, Cumberland County, N. J. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owners, School Board of Deerfield Township, care of architects. Frame, 1 story, 40x26 feet, shingle roof, pine floors. Plans in progress.

Drafting Room (alts.), Camden, N. J., \$30,000. Architect, private plans. Owners, Joseph Campbell Co., Camden, N. J. Consists of alterations, new office partitions, cement floors. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

School, Princeton Township, N. J. Architect, Robert Schumann, 932 Lambert street, Trenton, N. J. Owners, Board of Education, care of Mr. Anderson, secretary, R. F. D. No. 3, Princeton, N. J. Brick, 1 story, 115x60 feet, slag and slate roof, wood floors (heating, plumbing and lighting reserved). Owners taking bids, due June 12th. Dempsey & Hardy, Matthews Const. Co., both of Princeton, N. J.; Suttis & Bros., Hopewell, N. J., and Harry Hilton, Trenton, N. J., are figuring.

Residence (alts. and add.), Lawrenceville,

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BUILDING Alterations
Additions
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AWARDING A CONTRACT

N. J. Architect, Wm. Kleeman, First National Bank Building, Trenton, N. J. Owner, Dr. Russell, Lawrenceville, N. J. Frame, 2½ stories, pine floors, electric lighting. Owner will take sub-bids in about one week.

Administration Building and Superintendent's House and Sewage Disposal System, Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Manual Training and Industrial School, Bordentown, N. J. Brick, 2½ stories. Owners taking bids, due June 18th.

Schools (3) (alts.), Lambertville, N. J. Architect, Wm. A. Kleeman, Trenton, N. J. Owners, Lambertville School Board, care of Walter P. Hayhurst, District Clerk, Lambertville, N. J. Consists of masonry, carpentry (plumbing, electric lighting and heating reserved). Owners taking bids, due June 5th.

Miscellaneous Construction News

Apartments (alts.), 1218 Market street, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, L. M. Simpler, Wilmington, Del. Brick, 3 stories, general interior alterations. Plans in progress.

Store and Apartment (alts.), Eleventh and Lombard street, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Max Siegel, Wilmington, Del. Brick, 3 stories, general interior alterations. Plans in progress.

Store and Apartment (alts.), Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Harry Cohen, Wilmington, Del. Brick, 3 stories, general interior alterations. Plans in progress.

Residence, Greensboro, N. C. Architect, Chas. Barton Keon, Bailey Building, Philadelphia. Owner, A. W. McAlister, Greensboro, N. C. Hollow tile and stucco, 2½ stories, 50x125 feet, slate roof. Owner is taking revised bids.

Houses (531), Dundalk, Baltimore County, Md. Architect, Edw. L. Palmer, Jr., 513 N. Charles street, Baltimore. Owners, the Liberty Housing Co., Baltimore, Md. Stucco, brick and concrete, 2 and 3 stories, various sizes, slate and felt roofs, cement and pine floors, hollow tile, steam, salorie and pipeless

Buy pure lime, 99% pure, no core, no grit. **DAVID FRANCE CO.**,
Tasker Street Wharf, Delaware River, Phila. Both 'phones.

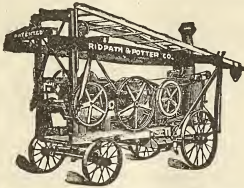
HEATING

BOWERS BROS. & CO.

1629 Ludlow Street
Philadelphia, Pa.

hot air heating, electric lighting, waterproofing, wire work. Owner has received bids.

Quarantine Station, Reedy Island, Del. Architect, private plans. Owners, U. S. Government, care of Jas. A. Wetmore, Washington, D. C. Reinforced concrete, brick and frame. Laundry, 1 story, 61x21 feet; Attendants' Quarters, 1 story, 70x28 feet; Barracks, 1 story, 81x28 feet, tin, shingle and prepared roof, pine floors, tile and marble work, metal lath, safety trends, iron stairs, ornamental iron work (heating and lighting reserved). Lowest bid submitted by Charlottesville Const. Co., Charlottesville, Va.



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MARYLAND

Construction News

Store and Warehouse, Gay and Wolfe sts., Baltimore, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore, Md. Owners, Northeastern Amusement Co., on premises. Brick (slow burning construction), 2 stories, slag roof, electric lighting, hollow metal skylights, roof ventilators, plastering, painting, tile work. Architect taking bids, due May 30th. West Const. Co., W. E. Harn & Co., and Hicks, Tase & Norris, all of Baltimore, Md., are figuring.

Storage Building (add.), 13-19 West North avenue, Baltimore, Md. Architect, F. E. Beall, 1335 North Gilmer street, Baltimore, Md. Owners, Security Storage Co., on premises. Brick and concrete and steel, 6 stories, 25x26 feet, slag roof, rolled steel sash, hollow metal skylights, metal doors, fireproofing, damp-proofing, hollow tile, metal lath, refrigerators, electric lighting. Architect taking bids. W. T. Childs, B. F. Bennett, Cowan Bros., and Fred C. Barre, all of Baltimore, Md., are figuring.

MARYLAND

Contracts Awarded

Store (alts.), 7, 9, 11 North Charles street, Baltimore, Md. Architects, Smith & May, Culvert Building, Baltimore, Md. Owners, the Hub, on premises. Consists of interior alterations, galleries, marble work, plastering, painting, ornamental iron work. Contract awarded to C. L. Stockhausen Co., 307 West Fayette street, Baltimore, Md.

Store (alts.), 716-18 West German street, Baltimore, Md. Architect, private plans. Owners, P. Lorillard Co., Charles and Barre streets, Baltimore, Md. Interior alterations, hollow metal skylights, ventilators, plastering, painting, plumbing, electric lighting. Contract awarded to E. R. Springer, 10 Uhler Alley, Baltimore, Md.

Coast Artillery Post, Baltimore, Md., \$60,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Cantonment Div. Contract awarded to H. D. Watts Co., 904 Garrett Building, Baltimore, Md.

Residence, Carlisle and Hilton streets, Baltimore, Md. Architect, C. P. Greer, 2209 Roslyn avenue. Owner, W. Harvey O'Connor, on premises. Frame, 2½ stories, slate roof, hot water heating, stone foundations, electric lighting, tile work. Contract awarded to E.

G. Turner, 15 East Fayette street, Baltimore, Md.

Garage, Belmar, Belair Road, Baltimore, Md. Architect, John Owens, Baltimore, Md. Owners, Lincoln Highway Garage, care of S. M. Schroeder, on premises. Brick, 1 story, 72x120 feet, composition roof, steam heating, electric lighting, metal doors, hollow metal skylights, ventilators, plumbing. Contract awarded to C. E. Stubbs, 546 Equitable Building, Baltimore, Md.

Hunting Lodge, Severn River, Md. Architect, Theo. W. Pietsch, American Building, Baltimore, Md. Owner, Bartlett Hayward, Scott and McHenry streets, Baltimore, Md. Stone, 1½ stories, shingle roof, electric lighting. Contract awarded to W. E. Harn & Co., 213 North Calvert street, Baltimore, Md.

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.

1918 BUILDING CONTRACTS SHOW BIG INCREASE.

An analysis of the reports of the F. W. Dodge Company made by John Burnham & Co., shows that the total building contracts awarded in the United States from January 1 to March 1, 1918, were \$298,770,000, as against only \$186,041,000 for the same period last year. Operations, however, continue spotty. New England had contracts for this period of only \$13,148,000, against \$24,293,000 last year. New York State and Northern New Jersey had only \$31,541,000, as against \$42,228,000.

Illinois, Iowa, Indiana, Wisconsin, Michigan and portions of Missouri and Eastern Kansas had only \$33,438,000, as against \$60,188,000. On the other hand, West Virginia and Ohio had \$77,543,000, as against only \$29,122,000, while Eastern Pennsylvania, Southern New Jersey, Maryland, Delaware, District of Columbia, and Virginia had \$140,255,000, as against only \$25,158,000.

It is, therefore, apparent that huge building operations are going on in a comparatively restricted area which could be inclosed within a circle having Baltimore as its center. The balance of the country has shown a considerable falling off. Concerns so fortunate as to have been awarded contracts in the so-called "war building zone" are rushed to capacity, whereas building, contractual, and material concerns are finding things quiet in the balance of the country.—"Painting and Decorating Contractor" (Chicago).

The man who doesn't advertise because he can't afford to "do it right" will never reach a position of affluence because everything worth while in the world had to have a beginning, and there can be no "get there" for the fellow who fails to make a start.

The impractical dreamers are not the architects, but the clients themselves, as a rule.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia,

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 1153 Hicks street, \$1,250. John Shea (O), 1414 Christian street. Dominick Jero (C), 519 Christian street. Brick, 2 stories, 16x34 feet, slag roof.

Office, Magnolia avenue and Haines street, \$1,500. Estate of David McManhon (O), P. O. Building, Germantown. Harry Johnson (C), 5811 Chew street. Brick, 2 stories, 16x31 feet, slag roof.

Wagon Shed, Delaware and Westmoreland, \$4,000. Pearson & Ludascher (O), Westmoreland street wharves. Harry G. Evans (C), 1417 North Warnock street. Brick, 1 story, 60x28 feet, slag roof.

Garage, Hunting Park and Blabou street, \$1,775. Eugene Ellwanger (O), on premises. Frank K. Stahl (C), 2713 North Park avenue. Stone, 1 story, 40x27 feet, slag roof.

Garage, Filmore and Loney street, \$650. Wm. Weimer (O), on premises. W. E. Strook (C), 7326 Second Street Pike. Stone and frame, 1 story, 17x21 feet.

Dwelling, 4600 North Warnock street, \$4,000. William J. Baltz (O and C), 709 Butler street. Brick, 2 stories, 16x45 feet, slag roof, hot water heating.

Dwelling and Garage, Eastwick and Eighty-eighth street, \$6,100. John Scholtz (O and C), on premises. Brick and hollow tile, 2 stories, 14x40 feet, slag roof, hot air heating; brick, 1 story, 11x17 feet, hollow tile, slag roof.

Garage, Alden and Baltimore avenue, \$300. H. Erb (O), 5713 Baltimore avenue. Asbestos Crete Building Co. (C), 1927 Market street. Iron on iron, 1 story, 12x18 feet.

Garage, 110-12 East Washington Lane, \$460. T. F. Hutchins & E. B. Howard (O), on premises. M. Moister & Co. (C), 3931 North Fifth street. Iron on iron, 1 story, 18x20 feet, metal lath covered with cement.

Garage, 214 Ashdale street, \$800. C. Kiem (O), on premises. M. Moister & Co., 3931 N. Fifth street. Iron on iron, 1 story, 12x18 feet, metal lath and cement finish.

Factory, 709-11 Cherry street, \$18,000. Jas. P. Burns (O), 713 Cherry street. John V. Speth (C), 1615 Sansom street. Brick, 5 stories, 29x50 feet, slag roof.

Transformer House, Eastwick and Eightieth street, \$30,000. Philadelphia Rapid Transit Co. (O and C), 810 Dauphin street. Steel framework, 1 story, 56x47 feet, brick and concrete, slag and cement, steel sash.

Garage, Seventh avenue and Sixty-fifth avenue, \$1,500. E. R. Perry, on premises. C. E. Lloyd, Jr. (C), Eighth and Sixty-sixth avenue. Stone, 1 story, 19x21 feet, slate roof cement floor.

Gas Produced House, James and Tasker streets, \$6,000. Fayette R. Plumb Co. (O), on premises. Rust Eng. Co. (C), 414 Penn Building. Reinforced concrete building, floors and roof.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, 6741 North Thirteenth street, \$1,864. C. E. Doan (O), on premises. The Hogg Const. Co. (C), 1634 Sansom street. Stone, 1 story, 10x10 feet and 9x6 feet, and alterations.

Dwelling, 152 East Pomona street, \$325. Chas. McCarty (O), on premises. Wm. C. Wright (C), 22 Harvey street, Germantown. Alterations.

Garage, Jackson and Higbee street, \$400. Sam Best (O and C), 3301 Higbee street. feet.

Milk Dairy, Sixteenth and Courtland street, \$300. Stenton Park Milk Dairy (O), on premises. John M. Smith & Sons (C), 1425 Spring Garden street. 25,000 gallon water tank.

Dwelling 8021 Frankford avenue, \$1,000. Dr. Wm. H. Morrison (O). J. A. Hand (C), 8029 Frankford avenue. Brick, 2 stories, 14x20 feet, tin roof.

Store and Dwelling, 1503 South Juniper street, \$400. David Giordano (O), on premises. Corridino De Tinnocentis (C), on premises. Brick, 1 story, 12x20 feet, slag roof.

Dwelling, 1836 East Cornwal street, \$1,000. Howard Schoem (O), 1830 East Westmoreland street. Barnes Bros. (C), 2080 East Wil-

lard street. Brick, 2 stories, 11x12 feet, slag roof and shed, 6x11 feet, tin roof.

Warehouse, 927-31 North Front street, \$3,000. Simon Weil (O), 831 North Third street. Robbins Cont. Co. (C), Lafayette Building. Brick, enclosed stairway and alterations.

Dwelling, 1214 Lehigh avenue, \$700. Harry Queens (O), on premises. J. Y. Loux (C), 3731 York Road. Brick, 1 story, 4x19 feet, slag roof.

Office, Rhwan street, west of Penna. R. R., \$8550. American Manganese Bronze Co. (O), on premises. F. W. Van Loan (C), Denckels Building. Frame, 1 story, 16x18 feet, slag roof.

Store and Dwelling, 159 South Eighth street, \$400. Lewis Mark (O), 437 South street. Jacob Bender (C), 1817 South Fourth street. New bulk.

Store and Dwelling, 3837 Mount Vernon street, \$1,350. Abe Cohen (O), on premises. A. P. Lueker (C), 1727 North Fifty-first street. Brick, 1 story, 10x14 feet, and new flush bulk.

Dwelling, 1644 North Marshall street, \$350. L. Anthony (O). Twentieth and Fairmount avenue. Max Kane (C), 871 North Sixth street. Repair fire damage.

Stable, 452-54-56 North Orianna street, \$1,000. Harry Goldsmith (O), on premises. Jos. Fisgaer (C), 1646 North Eighth street. New brick wall.

Store and Dwelling, 15504 East Passyunk avenue, \$300. Bernardo Chiarocchi (O), 1429 Passyunk avenue. Mike Cipriano (C), 1134 Watkins street. New flush bulk.

Dwelling, 1443 South Twenty-ninth street, \$400. F. A. Riemann (O), on premises. S. E. Brown Heating Co. (C), 18 South Seventh street. Install hot water heating.

Dwelling, 1423 South Twenty-ninth street, \$400. John McCabe (O), on premises. S. E. Brown Heating Co. (C), 18 South Seventh street. Install hot water heating plant.

Tool House, Broad and Fisher avenue, \$300. Mrs. P. C. Garrett (O), 524 Locust avenue, Germantown. Lufkin & Halbkram (C), 2215 North Twelfth street. Iron on iron, 1 story, 12x18 feet.

Garage, 762 Brooklyn street, \$2,300. Mary Cullen (O), on premises. M. F. Lambert (C), 6225 Haverford avenue. Fire repairs.

Storage, 1907 East Clearfield street, \$350. V. Steinberg (O), on premises. Arthur S. Brown (C), 1903 East Clearfield street. Brick, second story addition, 16x35 feet, slag roof.

Repair Shop, 2017 Sansom street, \$600. Anderson (O), on premises. E. J. Kreitzburg (C), 1345 Arch street. Elevator pit and framing on 2-story building.

Garage, Huntington and Jasper streets, \$1,100. Wm. H. & A. E. Margrison Co. (O), Rising Sun and Olney. Wm. H. Ashton (C), 5600 Mascher street. Alterations, reinforce roof.

Factory, Ridge and Calumet street, \$5,000. Powers Weighman Rosengarten (O), Ninth and Parrish streets. R. C. Ballinger Co. (C), 218 North Thirteenth street. Brick, 1 story, 70x55 feet and 32x37 feet, slag roof.

Factory, Sixteenth and Hamilton streets, \$16,000. Wm. Sellers Co. (O), on premises. F. A. Havens Co. (C), 845 North Nineteenth street. Reinforced concrete and brick, 5 stories, 21x42 feet, slag roof.

Warehouse and Garage, 510-18 South Randolph street, \$3,000. H. Purlstein (O), 515 S. Sixth street. H. B. Copperman (C), 611 S. Sixth street. Steam heating installed.

Store and Dwelling, 4165 North Eighth st., \$1,000. Evalina R. Henkel (O), on premises. Wm. J. Jones (C), 2927 North Fifth street. Brick, 1 story, 16x9 feet, slag roof, cement floor.

Dwelling, 4743 Milnor street, \$860. P. Zyminski (O), 767 South Front street. Phil Glassman (C), 431 South Sixth street. New flush bulk.

Dwelling, 1323 North Broad street, \$700. H. G. Hinkle (O), on premises. Samuel R. Detwiler (C), 1719 North Thirteenth street. Alterations, flush bulk window.

Dwelling, 929 Northeast Boulevard, \$450. J. Sukonhik (O), on premises. Harry Hartman (C), 342 Porter street. Brick, 1 story, 16x9 feet, slag roof, stone foundation.

Store and Dwelling, 3106-08 Richmond st., \$3,000. Michael Alschower (O and C), 3172 Richmond street. Brick, 2 stories, 20x30 feet, slag roof, alterations; brick 2 stories, 17x19 feet, slag roof, alterations.

Stack, Swanson and Mifflin streets, \$1,800. Union Petroleum Co. (O), on premises. H. R. H. Heinicke, Inc. (C), 21 South Twelfth street. Brick stack, 80 feet high.

Open Shed, Magnolia and Haines streets, \$1,500. Estate of David McManhon (O), P. O. Building, Germantown. Harry Johnson (C), 5811 Chew street. Fire repairs, open shed, 100x20 feet.

Lumber Shed, 424-26 Addison street, \$900.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Robert Fails (O and C), 415 South Fifth street. Alterations.

Stack, Water and Mifflin streets, \$900. Union Petroleum Co. (O), on premises. Robert E. Lamb Co. (C), 843 North Nineteenth street. Reinforced concrete stack foundations.

Offices, Forty-ninth and Market streets, \$1,600. W. J. Benham (O), 5213 Chestnut street. P. Gormley Co. (C), 155 North Tenth street. Low pressure steam heat installing.

Tank Tower, 2023 Hunting Park avenue, \$5,000. Link Bolt Co. (O), on premises. American Tank and Tower Co. (C), Elgin, Ill. Steel tower, 100 feet high to support tank of 50,000 gallons capacity.

Chimney and Power House, Sixteenth and Hunting Park avenue, \$13,000. Bellevue Worsted Mill (O), on premises. W. E. S. Dyer (C), 1518 Land Title Building. Brick stack and foundation, 1 story, 8x30 feet, slag roof.

Dye House, Trenton avenue and Cambria street, \$800. J. J. Diamond (O), on premises. H. Broekelhurst (C), 512 West Norris street. Alterations.

House and Store, 1201 South Seventh street, \$1,200. Vinecent Lzzo (O and C), 640 Federal street. Alterations, new brick wall.

Factory, Tulip and Bleigh streets, \$7,000. L. H. Gilmer Co. (O), on premises. H. C. Eisenbise (C), on premises. Brick, 1 story, 40 feet, slag roof.

Factory, 5119-21 Stiles street, \$16,000. Dentist Supply Co. (O), New York City. Philip Halbach Cont. Co. (C), 1261 North Twenty-sixth street. Brick, 2 stories, 21x34 feet, and 1 story, 10x13 feet, slag roof and slow burning construction.

Store, 2245 Ridge avenue, \$800. S. Stains (O), 4100 Germantown avenue. Basch Co. (C), 1420-36 South Front street. Flush bulk and alterations.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery, the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

Don't be discouraged if you make an occasional mistake; if men didn't there wouldn't need to be any claw on a hammer.

BIG CONSTRUCTION PROGRAM TO FOLLOW AHE WAR.

Investigation by New York City committees of building trades has revealed that more than \$5,000,000,000 will flow into projects through the United States in the rebuilding of Europe during the five years after the end of the war.

A large part of the reconstruction will be done by organizations in this country. France is negotiating already for more than \$150,000,000 outlay in the reconstruction of her devastated cities. Orders from both France and England are pouring into the National Lumber Manufacturers' Association, which reports that in one English city—Birmingham—50,000 houses of the frame type ought to be replaced at the earliest possible moment, the community needing from 10,000 to 20,000 more houses at once. The proposed rate of construction is to be 5,000 houses a year, the entire program calling for nearly 2,000,000,000 feet of American timber. The town council is preparing to handle operations which will involve \$6,250,000 annually.—"The Architect and Builder" (San Francisco).

FRENCH ARCHITECT'S POLITE PROTEST

Only the French architect knows the climatic conditions of their own country, the possibilities of light, and, more than all, the habits of living of the French peasants and town dwellers, who will instinctively shape their new life to the mold of the old. The French government, after considering the reconstruction problem for a long time, has instituted several competitions for young architects. Among the projects presented many have been worth while rewarding and retaining. These certainly could furnish inspiration for Americans who desire to help.

But forgive me if I say again that help will be most suitable if it is administrative instead of creative. It would be very sad, I cannot help but feel it, if we were to have in France an American village. We must have a new French village, though a modern one, if you like. The French architect knows the French spirit. Americans and Frenchmen are both democrats, I know. But in our lives we are organically different. The American has a genius for organization. The French have other geniuses. With American organization, you can be of an immense help after the war, but I assure you, it will give the best results in collaboration. The combination of French taste and American practical support will be perfect.

This undoubtedly will stimulate our American confreres and encourage them in their turn to bend their efforts toward a common goal of artistic regeneration. America is a young country, generous and sincere. Between us we could—France and America—bring about a renaissance of the arts, improving tastes and elevating ideals.—Henri Caro-Delvaile in "New York Evening Post."

Where the Newspaper "Counts" and Where it "Fails"

There are lines of business that are helped by newspaper advertising, but if you will take the trouble to look them up you will discover that they are lines in which the manufacturer is either dealing direct with the consumer or is selling something which is adaptable to general use.

Safety razors, dental creams, rubber heels belong in this category.

Everybody has use for them. The object of the advertising is confined largely to an effort to emphasize the advantages of certain makes over certain other competing makes. "Ad" men call that kind of advertising "building up a trade-mark" because its primary purpose is to fix a given make in the mind of the consumer to the exclusion of all other makes.

Building-trades advertising is quite a different story.

Here, you are selling something in which only a limited class may be said to have any interest.

If you could dig up a newspaper every copy of which found its way into the hands of an architect, or a builder, or a sub-contractor, or a building owner, it would pay you to hand up a rate of eighty cents an agate line for space.

But you can't.

When you buy space in the newspaper you pay for circulation probably ninety-eight per cent. of which represents, so far as you are concerned, dead waste.

In the building magazine this condition is diametrically reversed. As every copy goes to a reader directly interested in building, you are buying a circulation one hundred per cent. clear business prospects.

And the circulation being smaller by many thousands you are paying a very much easier rate and getting a very much more desirable "position."

You can't doubt this.

It's self-evident.

When the product to be advertised is anything to be used in building your medium is

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building
Trade Publication.

Perry Building, Philadelphia.

Advertising is nothing more nor less than good salesmanship reduced to print. The business man who can put "sales talk" into type has learned the cardinal principle of good advertising.

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

SALTING THE TAIL OF PROSPERITY

By Frank Adams Mitchell

(Continued from Last Week)

"Suppose," suggested I, "T. R. used the system of being afraid to tackle things. Do you think people would go miles just to look at him the way they do now? The system he's always operated under is to do the thing while the other fellow is thinking about it, and that's just about what George Smith has done in this case. While you've been hesitating and wondering whether it would pay, he has gone a head and anticipated your advertising campaign, and you've practically admitted he's getting a lot of business that used to come to you."

"I don't know but what you're right," grumbled George, "but I hate to see my profits run out through a knot-hole and it looks to me as though this advertising proposition amounted to about that."

"That's where you are wrong, George, and I'm going to prove it to you if you'll let me. You start in next week say, with a page advertisement in the Daily Chronicle. Follow that up from week to week with ads, not necessarily as large but fairly sizable, and at the same time take a list of architects and everybody around town who has anything to do with the building game. Start in a systematic campaign of letter writing. You have a girl here who does nothing nine-tenths of the time and that will at least keep her busy and the postage and letterheads would not amount to much. Then get some good advertising man to lay out a booklet for you illustrating some of the work you have done. Get it up in good snappy style, printed on nice paper that will take halftones well, and bound in an attractive way. After you have sent out three or four letters, shoot the book at them. I'm not charging you anything for this advice, but would be willing to guarantee it if I were to sell you the idea, and sell it to you on a no-result no-pay basis."

"Gee whiz," he exclaimed, "do you know that you are getting me in for over \$500 worth of expense right off the reel?"

"Sure I am, but what's \$500 expense if it gets you \$100,000 worth of business, and it will. If you don't think I'm right, lay the proposition before any one of the architects. He'll know what appeals to architects as a class and to the business men whose money goes into the building work."

"Monday morning," George said, "I'll go up to Henry Simpson and put it up to him. Henry's a mighty good friend of mine and is one of the best architects anywhere around this section. Besides that he knows how to go after business, which he spends a good deal of his time doing, leaving the designing work to his chief draftsman. He has

made such a success that I'd be rather inclined to follow his advice. The Lord knows that my business needs some new life put into it. I didn't tell you at the beginning that I've been worrying a good deal about the way things have been going lately."

"We'll call that settled then," said I, "but before we go up to the house, I've got another idea or so I'd like to tell you about. There's a nice lot of business lying around loose for the contractor who will go after it right. I don't refer to the big business, but some smaller jobs. Take this proposition of rejuvenating basements. It was only a day or so ago that I saw a mighty clever advertisement for a disinfectant. The ad said that nine out of ten basements are pestholes, and breeding places for disease; damp, poorly lighted, badly ventilated and filled full of rubbish generally. If you could convince building owners of this town of the necessity for cleaning up their basements, making them sanitary, dry, clean and livable, you'd pick up some nice business, and at the same time do a real work in the community. Suppose you worked up a folder showing a picture of a dirty unkept basement and over against that a picture of a freshly painted, clean, orderly basement, and then gave a few figures as to the small expense necessary to accomplish this desirable result, don't you think you'd stir up some business?"

"It sure would," acquiesced George, "and I've sort of an idea that work of that kind can be done in the winter time when things are slack."

"Just assume then, George, that you're sold on the idea. You agree to take a basement, repair the floor, plaster coat the walls if necessary using a good waterproofing on the floor and walls, give it a good coat of white paint and make a real place out of it. What have you accomplished? In the first place, you'll make a bit of money out of it. In the second place, the man who owns that building will be a prospective customer of yours when he does any construction work, and in the third place you've opened up a new department in your business. The way I look at it, too many of you contractors spend your time getting after big work and neglect the little odd jobs which as you say can be done in the winter time, to a large extent, and help to get your business better established. The firms nowadays who are making the big money are those who go after the by-products, and this work of reclaiming basements is one of the by-products of your own business."

"Say," said George, "I'd like to have a fellow like you down here for about a year. Anytime you want to throw up your job and

put a little money in my business, I'll give you a chance."

"Well," laughed I, "perhaps there isn't room for two of us, but I might work with you in a sort of advisory capacity, and make it a hobby of mine, as it were, though I honestly think that this business of yours can be given new impetus by the judicious use of advertising and the exploiting of the by-products, as I've taken the liberty of calling them."

Some time ago a very successful carpenter-contractor explained to me how he managed to make several hundred dollars more on each job than his competitors. His statements, almost word for word, are as follows:

"I figure in advance exactly what dimensions will work to best advantage in the structure that I am erecting. This does not apply very much in the matter of joists, studding and other heavy timbers. In sheathing, first and second flooring, siding, and the like, however, I find that it is possible to save a good many feet of lumber. In estimating the quantities of these latter parts of a house architects do not commonly give dimensions, but merely give lump quantities. In buying all lengths it invariably happens that good many short pieces will remain after boards have been cut to fit particular runs. For example, 14-foot siding never exactly laps center to center on studding spaced 16 inches center to center. The waste of 8 inches per board does not seem very great, but in the long run it amounts to a good many feet. And with lumber at \$30 and \$40 per thousand the loss quickly amounts to quite a good many dollars."

The writer finds from conversation with successful builders that increased emphasis is now placed upon this matter of figuring dimensions that will work without waste. It was no uncommon sight two decades ago when lumber was relatively much cheaper to see a carpenter cut 12 feet from a 14-foot board, and unconcernedly throw away the 2-foot piece remaining. In those days the waste did not run into money quite so fast as now; but now it is imperative that there be a large measure of exactitude in buying lengths that fit without waste. The carpenter or contractor who figures these things very carefully in advance will find that he may either add many dollars to his profits or may safely bid lower than his competitors. In the building game there's lots of money made with a good lead pencil and a 5-cent pad of paper.—E. V. L., in "National Builder."

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

Portland Cement, Sand or Gravel by the carload. Consult DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Ridpath & Potter Co.....Bourse Bldg., Phila.
John B. Rulon.....1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

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Warren-Knight Co.....136 N. 12th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Blue Prints.

Chas. H. Robbins.....125 S. 11th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Blue Print Paper.

Chas. H. Robbins.....125 S. 11th st., Phila.

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O. W. Ketcham.....Builders' Exchange, Phila.
Brick Renovating.

Adolph Christensen.....1433 Brown st., Phila.

Builders.

Hogg Construction Co., Inc.,
1634 Sansom st., Phila.
Mitchell Bros.....2125 Race st., Phila.
Pomeroy Const. Co.....1609 Ranstead st., Phila.

Builders' Supplies.

P. H. Fairlamb Co.....115 S. 30th st., Phila.
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Tasker st. wharf, Delaware River, Phila.

Builders' Equipment.

Service Equipment Co.....Bourse Bldg., Phila.

Cement.

P. H. Fairlamb Co.....115 S. 30th st., Phila.
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Tasker st. wharf, Delaware River, Phila.
Lehigh Portland Cement Co.,
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Anchor Post Iron Works,
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Staman & Dickey.....30 S. 16th st., Phila.

Lumber.

James E. Tague & Co.,
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Marble Mosaic.

Belfi Bros. & Co.....1923 Market st., Phila.
Italian Marble Mosaic Co.433 Spruce st., Phila.
Roman Mosaic and Tile Co. 435 Green st., Phila.

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Pearce Fireproof Co.....1345 Arch st., Phila.
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Meters.

Philadelphia Meter Co.,
Real Estate Trust Bldg., Phila.

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The Barrett Company,
New York and Philadelphia.
Felton, Sibley & Co.136 N. 4th st., Phila.

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The Barrett Co.....New York City and Phila.

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O. W. Ketcham.....Builders' Exchange, Phila.

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Merchant & Evans Co.,
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Terra Cotta (Architectural).

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Wm. B. Southern,
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The Barrett Co.....New York City and Phila.

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Diamond Flexible Metal Weather Strip Co.,
Geo. R. C. Johnston.....Drexel Bldg., Phila.
C. W. MacDowell Agency,
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C. W. MacDowell Agency,
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Audubon Wire Cloth Co., Inc....Audubon, N. J.

1792

1918

Insurance Company of NORTH AMERICA

PHILADELPHIA



126th Annual Statement	December 31, 1917
Cash Capital - - -	\$ 4,000,000.00
Reserve for Premiums - - -	10,630,740.40
Reserve for Losses - - -	4,419,000.00
Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
Losses Paid Since Organization - - -	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance	Automobile	Cotton Insurance
Tornado	Use and Occupancy	Marine
Sprinkler	Builder's Risk	Rent
Explosion	Tourist	Leasehold
Inland Transit	War Risk	Parcel Post
Salesman's Floater		Registered Mail



TRADE MARK
Reg. U. S. Pat. Office

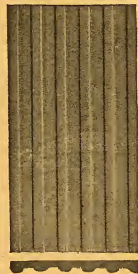
Expanded Metal, Metal Laths, Self-Sentering, Fireproof Building Specialties and Waterproofings

Are you familiar with the economy features of these materials? If not let us supply you with details and quote you on your requirements.

THE GENERAL FIREPROOFING CO.

1119 Pennsylvania Building
Philadelphia, Pa.

Prompt Deliveries from our Philadelphia Warehouse



MANUFACTURERS OF

DIAMOND AND RIBBED PATTERN Rolled Steel Floor Plates

SIZES FURNISHED ON APPLICATION



ADELPHIA

Steam and Hot Water Boilers Warm Air Furnaces
Ranges for either Coal or Gas or Combination Coal and Gas

ARE STANDARD IN CONSTRUCTION

SUPREME IN SATISFACTION-GIVING RESULTS

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While our Philadelphia warehouse, with its instant delivery service, with its large stocks of all sizes and styles insures that same BORDEN SERVICE rendered since 1878.

Visitors always welcomed at our new centrally located daylight showrooms containing the most complete and one of the finest assortments in the city.

BORDEN Stove Company

1313 ARCH STREET

PHILADELPHIA



When writing to advertisers, please mention THE BUILDERS' GUIDE.

Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 23
June 5, 1918

ISSUED WEEKLY IN THE INTERESTS OF ARCHITECTS, STRUCTURAL ENGINEERS,
CONTRACTORS AND THE MATERIAL AND EQUIPMENT TRADES

LESS THAN ONE YEAR
15 CENTS PER COPY



Instant Deliveries

Steam and
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Cooking Ranges

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Tank and Laundry Heaters

RICHARDSON & BOYNTON CO.

1332 Arch St., Philadelphia

VENTILATION

as it has been applied for the Cleveland Metal Products Co., Cleveland, Ohio



"STAR" VENTILATORS

(Patented)

will give more air exhaust capacity per dollar invested under like conditions of service and of equal construction strength than any other make of ventilator. The installation pictured above is only one of the many throughout the country on industrial plants and government buildings.

Also Manufacturers of

Evans "Almet" Fire Doors "Merchant's Old Method" Roofing Tin

We have just issued a forty page catalog descriptive of our Fire Doors and Ventilators. The edition is limited. Send for your copy NOW.

MERCHANT & EVANS CO.

NEW YORK PHILADELPHIA WHEELING
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THE NATIONAL CEMENT



"CONCRETE FOR PERMANENCE"

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WRITE, WIRE OR PHONE

IMMEDIATE DELIVERIES

from our large

PHILADELPHIA WAREHOUSE

REINFORCING BARS—Cut to Length
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DIAMOND MESH LATH
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UNITED STEEL STOCK SASH

TRUSCON STEEL COMPANY

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RAILINGS AND GATES OF CHARACTER AND BEAUTY

Iron Railings and Entrance Gates of appropriate design and perfect proportion would add much to the dignity and attractiveness of many country places. In other locations, for the protection of lawns and gardens, an

ANCHOR POST FENCE

with galvanized steel posts and woven wire panels, makes an admirable and long lasting enclosure.

We have catalogues illustrating Entrance Gates and Iron Railings, Lawn Fences, Tennis Courts, Poultry and Kennel Yard Enclosures, Aviaries, Arbors, Trellises, etc., and will gladly mail you the one you need.

ANCHOR POST IRON WORKS

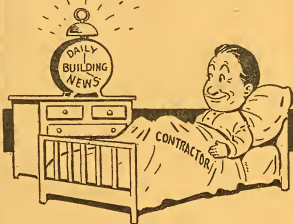
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NEWS TODAY



The News that
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Terrazza and
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Tiles for Floors and Fireplaces
Interior Marble Work
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1923 Market Street
PHILADELPHIA

Branch Office, Allentown, Pa.
225 COMMONWEALTH BUILDING

Base and Floor one continuous piece



MINERAL FLOOR

should be used wherever a sanitary floor is desired. Practically noiseless, it is the ideal floor for schools, public buildings, railway stations, stores, kitchens, etc.

Damp, Fire and Vermin Proof

WE LAY THIS FLOOR ANYWHERE
Information and samples on request

Philadelphia Mineral Flooring Co.
5632-34 Summer Street
Philadelphia, Pa.

Whitewashing and Water Painting SPECIFY

Analo Powder Paint

Whether applied by brush or machine, if done by our corps of trained artisans you are sure to get the best work at the lowest possible cost. Better see us today. "Let there be light"

WM. B. SOUTHERN
Manufacturer and Contractor
N. W. Cor. 12th and Spruce Sts.
PHILADELPHIA
Both Phones

O. W. KETCHAM

Manufacturer of

Ornamental Terra
Cotta
Face Brick
Hollow Tile
Paving Brick
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New York, 1170 Broadway
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Washington, Home Life Building

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In Pointing and Renovating
Stone, Brick and Terra-
Cotta Work

Old Brick Fronts made like new
1433 Brown St., Philadelphia, Pa.

The Originator of the New Method
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POMEROY CONSTRUCTION CO. Building Construction

Let us figure on YOUR building
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1609 Ranstead Street, Phila.

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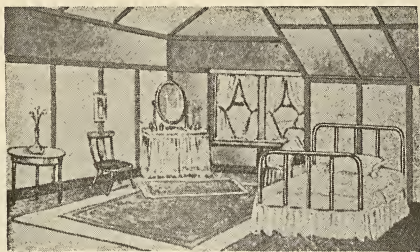
HOLMESBURG GRANITE CO.
Commercial Trust Building
PHILADELPHIA



Wells - Soundings
Test Borings

Artesian Well
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Real Estate Trust Building, Philadelphia



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For Lining Bungalows, Damp Walls, Attics, Garages, Poultry Houses, Etc.

Thoroughly established as the most economical material for interior lining. Artistic, quickly installed, durable and dependable, it is just what you are looking for. It has been called by many "The Board without a Peer." Ceil-Board's the real board.

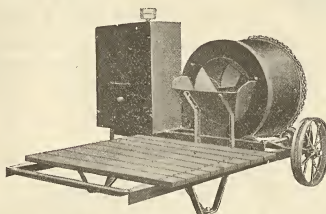
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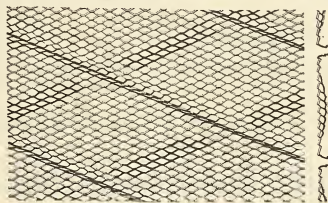
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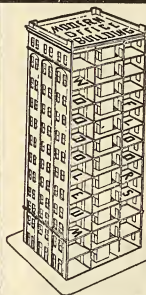
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 23

PHILADELPHIA
June 5, 1918

BUILDERS' GUIDE

FORMERLY

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and Builders' Guide

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As The Editor Sees It



THE first and most difficult step in mastery of our shortcomings is the arrival at a full realization of what those shortcomings are. We live in such close proximity with our blunders that a good perspective is not easily obtained:

"Oh wad some power the giftie gie us
To see oursels as others see us,
It wad frae monie a blunder free us
And foolish notion."

We can catch a glimpse of ourselves as others see us in "A French Architect's Polite Protest" which we printed last week in the "Guide," wherein the architect in question discourages the thought of an American village in France during the reconstruction of that country, and suggests that the combination of French taste and American practicality would be the most valuable and effective union.

Just so! American practicality! Or let us be honest and call it commercialism, for which Americans have been willing to sacrifice beauty, good taste and many other worth while things. Have these sacrifices in the interest of this false mistress of our fortunes been justified and worth while? We are beginning to believe not!

In City Planning and Industrial Housing the cheap way, the easy way, was not, in the end, the most profitable; and the humanitarians are now being supported by more "practical" citizens in far reaching and far seeing improvements.

Still another error of commercialism's

judgment comes to view at this time. Some very pertinent questions are asked and answered in the Bulletin of the Municipal Art Society by A. S. B.:

"Does bad advertising every really help a good cause? Undoubtedly. Does it ever help more than good advertising would? There is no proof—but common sense would seem to suggest an answer. To put the question concretely: Do the huge Socony billboards that mar the rural districts which the motorist delights to traverse make any more sales for the Standard Oil Company that would come to that company if the only Socony signs along the roads were small, tasteful signs at the stations where the gasoline itself is sold, or, where such stations are not upon the most traveled roads, small signs attracting by their color, design and convenience of location, telling the motorist where to go to obtain his necessary fuel? The vendors of advertising space—whose prices and profits increase with the size of their billboards—have but one answer. They believe in size. Their dividends look beautiful to them. But they have no proofs. Indeed, so far as proofs are at hand, they are multiplying to the effect that ugly advertising is bad advertising; that it is a false and ridiculous psychology that asserts that people are attracted by what offends them.

That is why the project to advertise the war by spending large sums to build trenches in Central Park, instead of in France, was bad advertising. What was to be advertised? A grim determination

to win the war through personal sacrifice and economy. How did the advertisers propose to evoke this spirit? By spending a very substantial sum on a pseudo-spectacle, and the wrecking of a large section of one of the city's best assets, viz., a part of Central Park which had just been restored to public use after four years of work and a corresponding expenditure. Why not advertise the war by smashing the windows in the City Hall? The effort of save Central Park, like the effort to damage it, advertised Central Park, but created no unity not already existent in support of the war. Nor would the trenches themselves have been worth their cost—worth in bonds which could not *otherwise* be sold—the large direct cost and much greater indirect cost in damage to and restricted use of the park.

One amusing detail of the dead project remains to be recorded. The reason for selecting the particular part of the park picked for sacrifice was the one factor which the Board of Estimate laughed to scorn and the Mayor reviled in impatience with artists—its rural beauty.

What is the most conspicuous advertising in town? War advertising, of course. It is everywhere—and what is more, it is *seen*. The citizen neither averts his eyes, nor looks at it and curses. Ninety-five per cent. of it is *small*. Perhaps sixty per cent. of it is artistic; that is, attractive. How long, we wonder, before the commercial advertiser will note these facts

**DRAWING
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**BLUE
PRINTS**

SOME time previous we printed a detailed account of the development of concrete during the last century, and the various and increasing number of ways in which concrete is being used. The following, from the "National Builder," are further examples of the satisfaction which concrete gives and the lesson that quality pays in the long run:

One specialty of an Eastern builder is concrete steps for porches. Many of the houses in his city have been equipped with porches containing floors and steps of wood. The wooden steps soon rot away, and the house-owners send for the builder to repair the wood-work. Our friend politely mentions the fact that concrete steps are practically indestructible. He quoted a special price, and he explains that the property would be greatly improved by the addition of neat, smooth concrete porch stairs. The wise owner generally heeds this sensible advice, and in numerous instances the owner has gone so far as to thank the contractor for the helpful suggestion. Many people do not stop to consider the advantages of concrete construction and it is necessary for the builder to remind them of such.

Not far away from Logan Square, Philadelphia, stands a handsome brown-stone residence. The owner is a wealthy gentleman. He believes in buying only the best things, such as furniture, clothing, etc., because he has learned through costly experience that it never pays in the long run to purchase anything which is not of good quality.

Some months ago this man found it necessary to have him home renovated. Builders and painters were engaged, and they were instructed to put into all of the new and repair work only the best of materials and craftsmanship. A very wise procedure indeed, and yet how few people there are in the world who really understand the advantages of the quality idea.

The contractors soon made wonderful changes in the house. Copper spouting took the place of the ordinary galvanized spouting, after it had been explained to the owner that the copper material would last for a life-time while the galvanized article would have to be renewed frequently. Other changes of this character were made. At last the carpenter prepared to repair the board fence which inclosed the back yard of the house.

"Strange thing about that fence," said the house owner. "I have been having it painted every year or so, yet I find now that the posts are rotted at the bottom, and many of the boards are in the same condition."

"There are a number of things which are radically wrong in the construction

of a fence of this kind," ventured the carpenter. "Note that the ploughed-and-grooved boards are arranged lengthwise, for example. When rains strike either side of the fence, a certain amount of the water or moisture remains in the grooves of the boards. This will in time cause decay. As for the posts, when it rains, considerable of the water runs in between the posts and the fencing. The tops of the posts hold some of the water, too. That's why the posts often rot away before the boards. Then, of course, the ends of the posts are buried in earth. The dampness and water soon ruin the part which is under ground."

"What is the remedy?"

"Posts of concrete; the boards set vertically, which would allow the water to run down the grooves immediately as it strikes on either side of the fencing."

"Good idea," admitted the owner, thoughtfully. "Go ahead and build a new fence on the plans you have suggested."

It was the builder's plain and truthful argument which led the gentleman to order a new and better construction of fencing. The concrete posts were sunk about three feet deep in the ground. The iron core of each post contained a ring at the top which could be used for the clothes-line. The cross beams were held to the posts by means of bolts with counter-sunk nuts. White pine ploughed-and-grooved lumber was used. Posts and wood were painted bronze green. When completed, it was a handsome as well as a very substantial fence, one that would last many years longer than the ordinary fence of this class. The owner was delighted with it, and he did not mind the additional expense in the least.

This kind of fence is recommended for house owners who do not want the open iron fencing around their back yards.

R. F. S.

Another testimonial of the fact that beauty and taste need not be sacrificed in the interest of practicality:

We Americans have always gone in for architectural beauty in homes while we neglected the same attention to places of business. There is no reason why a store building should not be as attractive from without as any home. Especially is this true where a building is small and does not aspire to sky-scraper proportions.

Perhaps the most attractive retail store in the country is located in the exclusive residence district of one of our Western cities. The retail grocery building of Smith & Company is a marvel for looks. In some ways it outshines, in exterior appearance, at least, the homes near which it is located. It might be taken for a French bungalow, a public library, or a small city hall,

The residents wanted no shoddy, common-looking stores in their midst, and the Smith grocery building is the outcome of this whim. The building is of cement and stucco and is valued at \$5,000. As a matter of fact, however, due to the fact that the owner was also the contractor and the designer, it cost somewhat less.

There is a terraced lawn, with a cement walk, in front, and a brick retaining wall. The windows and doors are of the French design, reaching to the floor. There is a broad uncovered veranda or brick terrace across the entire front on which the doors open, surrounded by a pedestaled balustrade. Live plants are given growing ground in cement urns, and a cement drive leads to the garage at the rear of the building.

The windows and doors are tastefully curtained.

MONROE WOOLEY in "Keiths."

A abundant illustration from European city planning characterizes the second annual report of the California State Capital Planning Commission. The work in Sacramento began with a committee of five in the Chamber of Commerce. Under the late Charles Mulford Robinson and afterward Werner Hageman, the Committee was increased to 150. This was followed by the engagement of Dr. John Nolen, whose city plan was written into the municipal code. The city, meantime, had acquired nearly 900 acres of municipal park. Then came the creation by the Legislature of a State Commission to develop Sacramento under the Nolen plan as a model capital. The second annual report of this Commission is now ready for distribution. Free copies may be had by addressing State Librarian M. J. Ferguson, Sacramento, California.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggo give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

The only road to advancement is to do your work so well that you are always ahead of the demands of your position. Our employers do not decide whether we shall stay where we are or go on and up; we decide that matter ourselves. Success or failure is not chosen for us: we choose them for ourselves.—H. W. Mabie.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Welding Shop (add.), 2024 N. 10th street, Philadelphia. Architects, Cornell & Matthews, Bulletin Building, Philadelphia. Owners, Penna. Range Boiler Co., on premises. Brick, 1 story, 11x23, slag roof, concrete floors, hollow metal sash and skylights, fire doors, roof ventilators. Owners taking bids due as soon as possible. John N. Gill & Co., Otis Building; E. E. Hollenback Inc., 1804 Brandywine street; Stewart Bros., 2526 N. Orkney street; Fred Broome, 4003 Sansom street; J. Frank Grant, 1025 N. 13th street; Wm. C. Dahl, 231 S. 8th street; H. H. Burrell, 206 S. Quince street, and Roydhouse-Arey Co., 112 N. Broad street, are figuring.

Garage, 13th street near Oak Lane avenue, Oak Lane, Philadelphia. Architect, Geo. S. Idell, 34 S. 16th street, Philadelphia. Owner, C. E. Doan, Sedgwick, Phila. Stone, 2 stories, 26x25, shingle roof, stone foundations, hot water heating, electric lighting, cement and yellow pine floors. Revised plans in progress.

Store, Manayung avenue and Conroe street, Roxboro, Philadelphia. Architect, Frank V. Nickels, 4400 Manayunk avenue, Roxboro. Owner, name withheld. Brick, 2 stories, 1x20, slag roof, yellow pine floors, hot water heating, electric lighting, flush bulks. Plans about completed. Ready for bids in a few days.

Box and Packing Shop, 25112, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Concrete, steel and brick, 83x122 (heating, reserved), slate and slag roof, concrete and maple floors, hollow tile, metal lath, elevators, roof ventilators, waterproofing, wire work, electric lighting, rolled steel sash, fire and kalamein doors, ornamental iron work. Owners taking bids due as soon as possible. Wm. Steele & Sons Co., 1638 Arch street; John R. Wiggins Co., Otis Building; Ketcham & McQuade, 1029 Brown street; Irwin & Leighton, 126 N. 12th street; Chas. McCaul Co., 1713 Sansom street; Wm. R. Dougherty, 1610 Sansom street; W. H. Anstine & Co., 1737 Filbert street; J. Sims Wilson Co., 1125 Brown street; Wills-Ludwick Co., 34 S. 17th street, Monaghan & Losse, Inc., 3016 Chestnut street, and Wark-Yardley Co., 1737 Filbert street, are figuring.

Schools (5) (alts.), Philadelphia. Architect, J. Horace Cook, 19th above Chestnut street, Philadelphia. Owner, Board of Education, 19th above Chestnut street. Consists of alterations to windows. Owners taking bids due June 6th. Mitchell Bros., 2125 Race street, and E. C. Durell, 1713 N. 24th street, are figuring.

Bake Shop and Storage Building, 620-624 S. 7th street, Philadelphia. Architect,

Herman H. Kline, 6t hand Mifflin street, Philadelphia. Owner, C. C. Friedman & Sons, on premises. Brick, 3 stories, 40x85, slag roof, steam heating, electric lighting, new brick ovens, hollow metal skylights, metal ceilings. Revised plans about completed. Architect will be ready for bids in a week.

Loading Racks, south of Pessyung Avenue Bridge Harbor and Wharf Lines of Atlantic Refining Co., Philadelphia. Architect, private plans. Owner, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Oak piles, steel work, 8 ft. high, 80x320, ornamental iron work. Owners taking bids. Conneen Construction Co., 1737 Filbert street; Pomeroy Construction Co., 1609 Ranstead street, are figuring.

Stores and Apartments, 1213-15 E. Cheltenham avenue, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, S. Goldfarb, 1201 E. Cheltenham avenue, Philadelphia. Brick, 2 stories and basement, 40x60, slag roof, maple floors, steam heating, electric lighting, tile work, hollow metal skylights, flush bulks, metal ceilings. Architect taking bids. J. Gorshow, 4116 W. Girard avenue, and Arthur M. Lance, Haynes street west of Limekiln pike, are figuring.

Kitchen and Office, 32nd and Passyunk avenue, Philadelphia \$8,000. Architect, private plans. Owner, Atlantic Refining Co., 3144 Passyunk avenue. Brick, 2 stories, 12x59, slag roof, cement floors, hollow tile (lighting and heating, reserved). Owners will sub-let.

Apartment House (alts.), 1722 Pine street, Philadelphia, \$3,500. Architects, De Armond, Ashmead & Bickley, 1527 Walnut street, Philadelphia. Owner, M. R. M. Stambach, on premises. Brick, 1 story, addition, 12x15, vapor heating, electric lighting, tile work, slag roof, hardwood floors. Owner will build.

Store and Residence (alt. and add.), 313 S. 5th street, \$2,000. Architect, Herman H. Kline, 6th and Mifflin streets, Philadelphia. Owner, Dr. M. Weinberg, 516 Pine street, Philadelphia. Brick, consists of excavating and reinforcing walls, cement work, electric lighting, flush bulks. Owner is taking bids.

Store and Office Building (alt. and add.), N. W. Cor 4th and Girard avenue, Philadelphia. Architect, I. W. Levin 2434 S. 8th street, Philadelphia. Owner, Samuel Lerner, on premises. Brick, 2 stories and basement, 60x18 addition, slag roof, reinforced concrete work, hot water heating, electric lighting, tile and marble work, work, cabinet work, cement work, metal lath, glazing, plastering, flush bulks, ornamental iron work, hardwood floors. Plans

about completed. Owner will be ready for bids in a few days.

Garage, 4234 Spruce street, Philadelphia. Architect, Geo. S. Idell, 34 S. 16th street, Philadelphia. Owner, Mrs. Walderston, care of architect. Brick, 1 story, 19x11, slag roof, cement floor, electric lighting. Architect taking bids due as soon as possible. Hogg Construction Co., 1634 Sansom street; T. C. Trafford, 1613 Sansom street, and Wark-Yardley Co., 1737 Filbert street, are figuring.

Sea Wall (Spec. 6502), 23029, Delaware River, Frankford Arsenal. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Piling and concrete work, 15 ft. high, 600 ft. long. Owners taking bids due June 7th. Ketcham & McQuade, 1029 Brown street, and Wills-Ludwick Co., 34 S. 17th street, are figuring.

Hospital (add.), Frankford and Wakefield street, Philadelphia. Architects, Stearns, Woodnut & Schmorhl, Stephen Girard Building, Philadelphia. Owner, Frankford Hospital, on premises. Architect taking bids due June 7th. A. R. Raff Construction Co., 1635 Thompson street; Wm. R. Dougherty, 1610 Sansom street; Ketcham & McQuade, 1029 Brown street, and H. E. Baton, 1713 Sansom street, are figuring.

Garage, 13th street near Oak Lane ave., Oak Lane, Philadelphia. Architect, Geo. S. Idell, 34 S. 16th street, Philadelphia. Owner, C. E. Doan, Sedgwick, Pa. Stone, 2 stories, 26x25, shingle roof, stone foundations, hot water heating, electric lighting, cement and yellow pine floors. Architect taking bids due as soon as possible. Wark-Yardley Co., 1737 Filbert street, additional bidders.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A overload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

To be poor in a wealthy country, to be sick in a good climate, to be inefficient among a progressive people, is a sign of unwise educational methods. Such people were not taught to battle with the world or meet life's emergencies.—Thoreau.

"TRIDENTS" FOR
WATER, OIL,
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ETC., ETC.

"TRIDENT" METERS

MORE TRIDENTS
IN PHILA. THAN
ANY OTHER
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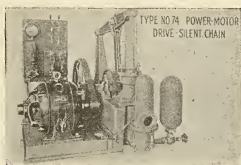
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Before your present company has a chance to say "No," ask me about placing your surety bonds. I'll give you the best of service, relieve you of all details, insure your getting lowest rates and protect you in every way. Get REAL SERVICE.

HARRIS J. LATTA

Pennsylvania Building

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Store Building (alts.), 1604 Ridge avenue, Philadelphia, \$5,600. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owner, Leighton McMullin, 1652 Ridge avenue, Philadelphia. General interior alterations, brick work, hollow metal skylights, electric lighting, plumbing, cement floor in basement, maple and hardwood floors, mill work partitions, (1) elevator, stairways, flush bulks, ornamental iron work (lighting fixtures and steam heating, reserved). Contract awarded to J. Sims Wilson Co., 1125 Brown street.

Hosiery Mill (alts.), 21st and Clearfield streets, \$15,000. Architect, private plans. Owners, Thos. E. Brown Co., on premises. Cement work, slow burning construction, plumbing, carpentry, cement floors, fire doors, ornamental iron work Contract awarded to Conneen Construction Co., 1737 Filbert street.

Factory, 80th and Bartram avenue, Philadelphia. Architect, Amos W. Barnes, Hermit and Righter streets, Roxboro, Pa. Owners, Richard L. Wallace Co., 120 Chestnut street, Philadelphia. Brick and reinforced concrete, 1 and 2 stories, 76x339 and 50x60, slag roof, cement and maple floors, metal window guards, rolled steel sash, fire doors, ornamental iron work (heating, plumbing, lighting and elevator, reserved). Contract awarded to Concrete Construction Co., 1618 Thompson street.

Store (alt.), 4929 N. Broad street, Philadelphia, \$3,200. Architect, private plans. Owner, M. L. Kemmerer, on premises. Brick and steel, 1 story, tin and slag roof, concrete floors, metal lath, stone foundations,

ornamental iron work (plumbing, heating and lighting, reserved). Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Office and Bank Building (alts.) 20-22 S. 15th street, \$3,000. Architect, private plans. Owners, Franklin Trust Co., 15th and Market streets, Philadelphia. Elevator channel, iron work, frame and metal, metal lath. Contract awarded to Edw. Stonehill, 15th and Market streets.

Runway Bridge, over Orianna street south of Cumberland street, \$6,000. Architect, private plans. Owner, Wm. Ayers & Sons, 3rd and Cumberland streets. Reinforced concrete and steel and plaster, 6x32, corrugated iron roof, concrete floors. Contract awarded to Chas. McCaul Co., 1713 Sansom street.

Store (fire repairs), 926 Walnut street,

Residence, Haverford, Pa. Architects, Bissell & Sinkler, Otis Building, Philadelphia. Owner, Dr. Francis W. Sinkler, 1606 Walnut street, Philadelphia. Brick, 2½ stories, 37x69, shingle and tin roof, oak and pine floors, metal lath (heating, electric lighting and hardware, reserved), tile work. Architects taking bids due June 10th.

Philadelphia, \$5,000. Architect, private plans. Owner, Estate of Julius Wellner, on premises. Consists of plastering, painting, mill work, slate roof. Contract awarded to Lam Building Co., 1001 Wood street.

Residences (12), 901-923 N. 64th street, Philadelphia, \$84,000. Architect, private plans. Owners, Moss & Taylor, 560 N. 58th street, Philadelphia. Stone and brick, 3 stories, 24x36, slate roof, steam heating, combination lighting, hardwood floors. Owners will build.

Garage, 64th and Overbrook avenue, Philadelphia, \$6,200. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owner, John Blatz, on premises. Stone, 2 stories, 36x25½, tile roof, cement and yellow pine floors, heating extension, electric lighting, plumbing. Contract awarded to Milton W. Young, Overbrook, Philadelphia.

Store and Office Building, 52nd and Walnut streets, Philadelphia. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, Daniel L. Evans, Lafayette Building, Philadelphia. Brick, 2 stories, 40x50, slag roof, stone foundations, steam heating, electric lighting, tile work, metal ceilings (store fixtures, see architect). Contract awarded to Rush Bros, 1100 Fillmore street, Philadelphia.

PENNSYLVANIA

Construction News

Frank G. Stewart, 1619 Sansom street; **E. R. Hall,** 34 S. 17th street; **H. H. Burrell,** 206 S. Quince street; **Gray Bros.,** Rosemont, Pa.; **Wolfe & Co.,** Bryn Mawr, Pa., and **Stokes Bros.,** 6723 Musgrave street, are figuring.

Garage, Rosemont, Pa. Architects, Duh-ring, Okie & Ziegler, Bailey Building, Phil-

**SCALES
AND
VALVES**

The Fairbanks Company
Corner 7th and Arch Sts.
Philadelphia, Pa.

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AND
DRAG SCRAPERS**

If you want Trap Rock or Slag, any size or grit, we are headquarters for same. **DAVID FRANCE CO.,** Tasker Street Wharf, Delaware River, Philadelphia.



Above photo shows why we dare *Guarantee* Barrett Specification Roofs for 20 Years—

Above is a photograph of a cross-section cut from a Barrett Specification Roof.

Note its great thickness.

Note the five alternating layers of Specification Pitch and Felt Waterproofing.

Note the heavy wearing-surface of Slag bound with Pitch.

No other type of roofing approaches a Barrett Specification Roof in the amount of protective waterproofing material used in its construction.

The weight of this waterproofing material is about 250 lbs. to 100 sq. ft., compared with 175 to 100 lbs. used in other types of roofs.

The wonder is *not* that we dare guarantee such a roof for twenty years, but that some people still buy light-weight, poorly constructed roofs and expect them to give long and satisfactory service.

The buyer naturally asks, "Do such roofs cost more than others?" Our answer is, "*No, they do not.*"

The experience of many years has proved that Barrett Specification Roofs *cost less p. r. year of service* than any other kind. It is because they give such long service at such low cost that this type of roofing now covers most of the permanent structures of the country.

It is because of these facts that leading architects, engineers, and roofing contractors everywhere are cooperating with us in the better roofs movement and why large construction companies like the Turner Construction Company, the Fuller Construction Company, the Austin Company, and many others, are so strong for Barrett Specification Roofs.

Booklet explaining our 20-Year Guaranty and a copy of The Barrett Specification free on request.

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Cleveland
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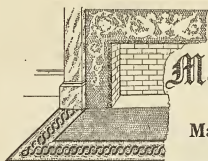
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AWARDING A CONTRACT

adelphia. Owner, Mrs. Samuel Vauclain, Rosemont, Pa. Brick and frame, 1 story, 24x39, shingle roof, cement floor, hot water heating, electric lighting (gasoline storage system, reserved), roadway work. Architect taking new bids due June 5th. W. H. Worriow, Devon, Pa.; F. B. Davis, 240 N. 16th street; Gray Bros., Rosemont, Pa., and Wolfe & Co., Bryn Mawr, Pa., are figuring. **Synagogue (alts.)**, 238 West Third street, Chester, Pa. Architect, Herman H. Kline, Sixth and Hiffins streets, Philadelphia. Owners, congregation of Bnai Aaron, on premises. Brick, 3 stories, 22x75 feet, slag roof, yellow pine floors, cabinet work, marble trim, electric fixtures, cement work, stained glass, ornamental iron work (plumbing and heating reserved). Plans about completed. Architect will take bids in one week.

School, Lester, Pa. Architect, George I. Lovett, 416 Walnut street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick, 1 story, 131x133 feet, slag roof, pine floors (steam heating, electric lighting and plumbing reserved). Owners taking bids, due June 10th. Wm. R. Dougherty, 1610 Sansom street; F. L. Hoover & Son, 1023 Cherry street; F. B. Davis, 240 North Sixteenth street, and Smith-Hardican Co., 1606 Cherry street; Stacy Reeves & Sons, 2011 Market street; Wark-Yardley, 1737 Filbert street, are figuring.

School, Essington, Pa. Architect, George I. Lovatt, 416 Walnut street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick, 1 story, 131x133 feet, slag roof, pine floors (steam heating, electric lighting and plumbing reserved). Owners taking bids, due June 10th. Wm. R. Dougherty, 1610 Sansom street; F. L. Hoover & Son, 1023 Cherry street; F. B. Davis, 240 North Sixteenth street, and Smith-Hardican Co., 1606 Cherry street; Stacy Reeves & Sons, 2011 Market street; Wark-Yardley, 1737 Filbert street, are figuring.

Machine Shop and Office, Rutherford, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete and brick, 1 story, 175x50 feet and 41x20 feet, asbestos roof, cement, pine and mastic floors, electric lighting, rolled steel sash and skylights, fire doors, ornamental iron work, roof ventilators, asbestos roof from machine shop to engine house. 65x20 feet. Owners taking bids, due June 5th. Irwin &

Leighton, 126 North Twelfth street; F. W. Mark Cont. Co., Finance Building; Robt. E. Lamb Co., 943 North Nineteenth street, Philadelphia, additional bidders.

Store and Apartments (alts.), High street, Pottstown, Pa. Architect, Arthur Kepner, Pottstown, Pa. Owner's name withheld. Brick, 3 stories. Plans started.

Store Building (alts.), Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Harry Zable, Reading, Pa. Brick, 4 stories, 36x270 feet, carpentry, hardwood floors, tile work, metal bulks. Plans in progress.

Apartment House (alts.), 208 Penn street, Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Mrs. Lillie Specht, Reading, Pa. Brick, 2½ stories, carpentry, plastering, yellow pine floors, vapor heating, electric lighting. Owner taking bids. L. Heinley, Daniel H. Hunter, Charles Schlegel, and Geo. Kline, all of Reading, Pa., are figuring.

Apartment House (alts.), 111 South Sixth street, Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Mrs. Lillie Specht, Reading, Pa. Brick, 3 stories, carpentry, plastering, yellow pine floors, vapor heating, electric lighting. Owners taking bids. L. Heinley, Daniel H. Hunter, Chas. Schlegel, Geo. Kline, all of Reading, Pa., are figuring.

Store Building (alts.), 811 Penn street, Reading, Pa. Architect, Alexander Smith, Reading, Pa. Owner's name withheld. Brick, 2 stories, 30x15 feet, hardware, electric lighting, hollow metal skylights. Architect taking bids. Beard Const. Co., Reading, Pa., is figuring.

Residence, Reading, Pa. Architect, A. A. Rither, Reading, Pa. Owner, Max Loria, Reading, Pa. Hollow tile and stucco, 2½ stories, 60x64 feet, Spanish tile roof, vapor heating, electric lighting, tile and marble work. Architect taking bids, due June 10th. Daniel H. Hunter, Geo. A. Koch, Beard Const. Co., Chas. Schlegel, H. J. Raudenbush, all of Reading, Pa., and J. H. Greiner, Lebanon, Pa., are figuring.

Club House, Antetum Lake, Pa. Architect, C. J. Young, 520 Washington street, Reading, Pa. Owners, Lakeview Country Club, care of architect. Stucco, 2 stories, 38x60 feet, shingle roof, pine floors, hot water heating, electric lighting (heat and plumbing reserved). Lower bidder, Geo. Derr, Reading, Pa.

Fire House, Reading, Pa. Architect, W. A.

Pink, 426 Franklin street, Reading, Pa. Owners, City of Reading, care of Peter Hull, City Hall, Reading, Pa. Brick, 2 stories, 34x104 feet, tin roof, cement floors (steam heating, electric lighting and plumbing reserved). Contract awarded to Pehr & Rourke, Nichols and Spring streets, Reading, Pa.

Engine House (12 stalls), Reading, Pa., \$160,000. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Reinforced concrete and brick, 1 story, 14x27x32 feet, asbestos roof, cement and wood floors, hollow tile, rolled steel sash, fire doors, wire work. Contract awarded to H. E. Baton, 1713 Sansom street, Philadelphia.

Garage, North Seventh street, Harrisburg, Pa., \$12,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Brick and concrete, 1 story and basement, 105x26 feet, slag roof, cement floor, rolled steel sash, hollow metal skylights, fire doors, iron stairs, roof ventilators, waterproofing. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Miscellaneous Construction News

Barracks (for 240 men), New London, Conn. Spec. 2906. Architect, private plans. Owner, Department of Yards and Docks, care of C. W. Parks, Chief, Washington, D. C., for Fort Trumbull Reservation. Brick, concrete footing, 2 stories, 100x165, composition roof, cement and composition, concrete foundations, steam heating, electric work, roof ventilators, dampproofing. Owners taking bids due June 8th. Irwin & Leighton, 126 N. 12th street, Philadelphia, are figuring.

Mine Laboratory. Spec. 2937, Navy Yard, Washington, D. C., \$73,600. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete and brick, 2 stories, 120x60, slag roof, steam heating, electric lighting, tile, marble and terrazzo work, composition, maple and mastic floors, metal lath, safety treads, roof ventilators, fire doors, iron stairs, waterproofing, wire work, ornamental iron work.

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NEW JERSEY Construction News

Residence (alts.), 140 W. State street, street, Trenton, N. J. Architects, Fowler & Seaman, Broad St. Bank Building, Trenton, N. J. Owner, F. S. McIlvaine, care of architect. Brick, 3 stories, general interior alterations, electric lighting, hardwood floors. Plans in progress.

Store Building (alts.), 8-10-12 E. State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, F. A. Duggan, Trenton, N. J. Brick and stucco, 2 stories. Plans in progress.

Store Room, Vineland, N. J. Architect, F. H. Bent, State Capital, Trenton, N. J. Owner, State Home for Feeble-minded Women, Vineland, N. J. Brick, 1 story, 50 x 64, slag roof, yellow pine floors, electric lighting. Owners taking bids. C. Y. Barlow, Trenton, N. J., is figuring.

Warehouse (alts.), Trenton, N. J. Architect, Wm. Klemann, Trenton, N. J. Owner, Alex. Klinkowstein, Trenton, N. J. Brick, 3 stories, 30x60, slag roof, cement floors, electric lighting. Architect taking bids. J. H. Morris, S. W. Mather, Fred Parker, Burton & Burton and C. J. Smith, all of Trenton, N. J., are figuring. Bids due June 6th.

Schools (3) (alts.), Lambertville, N. J. Architect, Wm. A. Kleemann, Trenton, N. J. Owners, Lambertville School Board, Walter F. Hayhurst, Lambertville, N. J. Consists of masonry, carpentry (plumbing, electric lighting and heating, reserved). Owners taking bids due June 5th. Jas. H. Morris and Fred Parker, Trenton, N. J., are figuring.

Plate and Angle Shop, Camden, N. J. Architect, private plans. Owner, New York Shipbuilding Corporation, Camden, N. J. Structural steel, 600x200x100 high, rolled steel sash and skylights, composition roof, cement and concrete work, electric lighting. Owners will build.

Forge Shop, Building "X," Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corporation, Camden, N. J. Brick, slow burning construc-

tion, 1 story, 45x55, slag roof, concrete floors. Owners will build.

Housing Project, Gloucester, N. J. Architect, John Udall, 29 West Thirty-fourth street, New York City. Owners, U. S. Government, Emergency Fleet Corp., Philadelphia, for Pussey & Jones Co., care of C. Stewart Lee, Wilmington, Del. Brick, frame and stucco, 2 stories, 4, 5 and 6 rooms, hot air and hot water heating, electric lighting, plumbing. Owners will take bids in near future.

Residences (3), Atlantic City, N. J. Architects, Druckenmiller & Williams, 1527 Chestnut street, Philadelphia. Owner's name withheld. Brick and stucco, 3 stories, 30x65 feet, slate roof and tile roof, hardwood floors, vapor heating, electric lighting, tile and marble work. Plans in progress. Will be ready for bids in about ten days.

Signal Tower and Battery House, Manville Junction, N. J. Architect, Samuel T. Wagner, Twelfth and Market streets, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Brick, steel and stone, 2 stories, 15x26 feet and 18x34 feet, slag roof, asbestos shingle roof, concrete floors, hot water heating, electric lighting, fire and hollow metal doors, iron stairs, concrete floors, ornamental iron work, roof ventilators. Owners have received bids.

School (add.), Rummecede, Camden County, N. J. Architect, Thos. W. Stevens, Camden. Owners, Board of Education of Centre Township, care of John Bowers, secretary, Rummecede, N. J. Brick, 1 story, 2 rooms, slag roof, pine floors. Plans approved.

School (alts.), Millville, N. J. Architect, Arnold H. Moses, 134 South Fourth street, Philadelphia. Owners, School Board of Millville, care of Mark S. Branim, President, Millville, N. J. Consists of fire towers, stair cases and stairs. Architect taking bids, due June 12th.

Restaurant (alts.), North Brorad street, Trenton, N. J. Architect, private plans. Owners, Charles Wing & Fee Foo, North Broad street, Trenton, N. J. Brick, 2 stories, carpentry, electric lighting, tile work, metal ceilings. Contract awarded to C. Y. Barlow, Trenton, N. J.

Delaware Construction News

Residences (550), Quarters for Single Men, Apartments (40), etc., Wilmington, Del. \$1,250,000. Architects, Ballinger & Perrott, 17th and Arch street, Philadelphia. Owners, U. S. Shipping Board, 1421 Arch street, Philadelphia. Town Planner, John Nolen, Cambridge, Mass. Owners taking bids due June 10th. The following are figuring: F. W. Mark Construction Co., Finance Building; Harry Brocklehurst, 512 W. Norris street; Warren-Moore Co., Colonia Trust Building; Irwin & Leighton, 126 N. 12th street, Philadelphia; Piel Construction Co., Baltimore, Md.; J. A. Bader Co., Wilmington, Del.; Delaware Builders' Corporation, Wilmington, Del.; Northeastern Construction Co., 225 Fifth avenue; Cauldwell-Wingate Co., 381 Fourth avenue; Lynch Construction Co. 163 E. 9th street; David Nicholson, 80 Wall street, all of New York City; Cramp & Co., Denckla Building, Philadelphia; Wm. Steele & Sons Co., 1600 Arch street, Philadelphia; Powers Kennedy, 149 Broadway, New York; J. Henry Miller Co., Baltimore, Md.; Gray Construction Co., Southern Building, Washington, D. C., are figuring.

Hall (inf alts.), 2nd and Justison streets, Wilmington, Del. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Board of Education, care of Mr. Guthrie, Secretary, Wilmington, Del. Brick, 3 stories, 50x70, mill work, plastering, tile and marble work. Architect is taking sub-bids.

Residence (alts.), Wilmington, Del. Architect, R. C. Tindall, Wilmington, Del. Owner, Ralph Derr, care of architect. Brick and frame, 3 stories, stucco work, mill work, plumbing, electric lighting. Architect ready for bids.

Residence (alt.), 17th and Greenville avenue, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, name withheld. Brick, 2½ stories, general alterations, plastering, mill work, electric lighting. Contract awarded to Howard W. May, Wilmington, Del.

Many a man would do a better job if he didn't know about putty.—Ex.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

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Auto Truck Delivery to Philadelphia

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwellings (21), Frazier and Kingessing avenue, \$83,300. (O & C), Steltz & Melony, 1208 Chestnut street. Stone and brick, 2 story, 16x33, slag roof, hot water heating.

Garage, Foulkrod and Hawthorne streets, \$700. (O), V. L. Baker, Foulkrod and Hawthorne streets. (C), Buzby & Proper, 1658 Unity street. Brick, 1 story, 15x21, slag roof.

Storage Building, 319 Kater street, \$2,000. (O), Geo. Orowitz Son, 326 South street. (C), Frank Kaiser, 1517 South 6th street. Brick, 2 story, 13x17, slag roof.

Dwelling, Rex and Ridge avenue, \$2,400. (O), Andrew Ripka, West Leverington avenue. (C), Andrew Ripka, West Leverington avenue. Frame, 1 story, 24x1, stone foundation, shingle roof.

Office Building Shed, Somerset and Tulip, \$17,500. (O & C), Philadelphia Wool and Scouring, Somerset and Tulip. Brick, 2 story, 20x55, slag roof; open shed, 70x171, slag roof.

Dwellings (2), Suffolk avenue and 84th street, \$2,400. (O), Lawskinsky, 84th and Albertson. (C), Max Kleiman, 84th and Gibson. Brick, 1 story, 16x36, slag roof, stone foundation.

Dwellings (12), 901 to 923 North 64th street, \$84,000. (O & C), Moss & Taylor, 500 North 58th street. Stone and brick, 3 story, 24x36, slate roof, steam heat.

Garages (10), 1508-05-21-29 Nedro avenue, \$3,000. (O), Cofman, 417 Loffast. (C), Philip Robin, 322 East Cambria. Brick, 1 story, 12x20, slag roof.

Garages (10), 16th and Nedro avenue, \$3,000. (O), I. Cofman, 417 Loffast. (C), Philip Robin, 322 East Cambria. Brick, 1 story, 12x20, slag roof.

Garage, 64th and Overbrook avenue, \$6,200. (O), John B. Blatz, 64th and Overbrook avenue. (C), M. W. Young, Overbrook, Pa. Stone, 2 story, 36x25, tile roofing, steam heating.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Saloon, 16th and Clearfield streets, \$2,500. (C), Schmidt & Sons Brewing Co., 127 Edward street. (C), Raith Construction Co., 302 West Master street. Brick, 1 story, 14x16, and interior alterations.

Store, 828 North Broad street, \$500. (O), A. MacDonald, 826 North Broad street. (C), Sam J. Rea & Son, 1608 Fairmount avenue. Alterations.

Store and Dwelling, 4675 Frankford avenue, \$2,500. (O), Geo. Smith, 4675 Frankford avenue. (C), J. D. Frothingham, Arrott and Castor road. Brick, 2 story, 16x40, slag roof.

Factory, 1025-27 Ridge avenue, \$1,200. (O), Lewis Estate, 1535 Pine street. (C), A. H. Spenard, 822 Wood street. Fire repairs.

Printing Office, 5th and Pine streets, \$450. (O), Louis Gerson, 5th and Pine streets. (C), Nicholas Nardy & Co., 763 South 13th street. Alterations.

Heating Plant, Pelham and Horter streets, \$5,800. (O), Germantown Steam Heating Co., Pelham and Horter streets.

(C), Wilbert O. Springer, 1624 Latimore. Brick, 1 story, 20x31, slag roof.

Dwelling, 1722 Pine street, \$3,500. (O & C), M. R. M. Stambach, 1722 Pine street. Brick, 1 story, 12x15, slag roof and alterations.

Store and Dwelling, 279 South 5th street, \$500. (O), B. Furber, 717 Walnut street. (C), A. Barsky, 636 Pine street. Brick, 1 story, 14x10, slag roof.

Roof Sign, 30th and Locust streets, \$1,600. (O), Morris Wheeler Co., 30th and Locust streets. (C), Federal Sign System Co., 1627 Sansom street. Roof sign, 9x200.

Dwelling, 924 North 41st street, \$2,000. (O), Wm. Troutwine, 1328 Chestnut street. (C), Wm. Troutwine, 1328 Chestnut street. Brick, 1 story, 10x7 and 3rd story, 16x13.

Store, 310 Market street, \$600. (O), Myers Bros, 22nd and Market. (C), the Volk, 335 Wolf street. Brick, 1 story, 10x13, tin roof.

Sheds (3), Rhawn and Penna. R. R., \$2,800. (O), American Mangannise Bronze

Where the Newspaper "Counts" and Where it "Fails"

There are lines of business that are helped by newspaper advertising, but if you will take the trouble to look them up you will discover that they are lines in which the manufacturer is either dealing direct with the consumer or is selling something which is adaptable to general use.

Safety razors, dental creams, rubber heels belong in this category.

Everybody has use for them. The object of the advertising is confined largely to an effort to emphasize the advantages of certain makes over certain other competing makes. "Ad" men call that kind of advertising "building up a trade-mark" because its primary purpose is to fix a given make in the mind of the consumer to the exclusion of all other makes.

Building-trades advertising is quite a different story.

Here, you are selling something in which only a limited class may be said to have any interest.

If you could dig up a newspaper every copy of which found its way into the hands of an architect, or a builder, or a sub-contractor, or a building owner, it would pay you to hand up a rate of eighty cents an agate line for space.

But you can't.

When you buy space in the newspaper you pay for circulation probably ninety-eight per cent. of which represents, so far as you are concerned, dead waste.

In the building magazine this condition is diametrically reversed. As every copy goes to a reader directly interested in building, you are buying a circulation one hundred per cent. clear business prospects.

And the circulation being smaller by many thousands you are paying a very much easier rate and getting a very much more desirable "position."

You can't doubt this.

It's self-evident.

When the product to be advertised is anything to be used in building your medium is

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building
Trade Publication.

Perry Building, Philadelphia.

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

Co., Rhawn and Penna. R. R. (C), F. W. Vanloon, Denckla Building. Sheds, 19x20, 9x20, 1 story, and 1 story, 29x37, new roofs, brick.

Store and Dwelling, 1921 South 7th street, \$400. (O), E. Staffin, 1900 South 7th street. (C), Sol Kravitz, 735 Morris. New flush bulk.

Office and Bank Building, 20-22 South 15th street, \$2,000. (O), Franklin Trust Co., 15th and Market. (C), Ed Stonehill, 15th and Market. Elevator, iron channel frame metal and metal lath, plastering.

Garage, 4801 Rising Sun avenue, \$800. (O), F. C. Kallenberg, 4801 Rising Sun avenue. (C), Chas. Sims (no address). Brick, 1 story, 12x14, slag roof.

Dwelling, Park and Montgomery avenues, \$2,000. (O), W. S. Kirk, 1801 North Park avenue. (C), W. S. Kirk, 1801 North Park avenue. Brick, 3 story, 20x15 and brick fence.

Garage, 5431 North 6th street, \$398. (O), Annie Landis, 5431 North 6th street. (C), John M. Hoepft, 2015 North 5th street. Brick, 1 story, 11x17, slag roof.

Dwelling House, 4822 Regent street, \$2,500. (O), Dr. A. T. French, 4822 Regent street. (C), Stickert & Co., 1420 Chestnut streets. Interior alterations and hot water heating.

Garage, 3014-16-18 Frankford avenue, \$15,300. (O), West T. Conn, 3014-16-18 Frankford avenue. (C), Louis Sohn, 417 Christian street, plumbing and alterations and heating.

Runway Bridge over Oiranna street, south of Cumberland, . . . 6,000. (O), Wm. Ayres Sons, 3rd and Cumberland. (C), The Chas. McCaul Co., 1917 Sansom. Rein concrete and steel corrugated iron roof, 6x92, cement plaster.

Store and Dwelling, 313 South 5th street, \$1,650. (O), Moses Weinberg, 501 Pine street. (C), Harry Miller, 427 Catharine. New flush bulk and alterations.

Kitchen and Office, 32nd and Passyunk, \$8,000. (O & C), Atlantic Refining Co., 3144 Passyunk. Brick, 2 story, 12x59, concrete floor, hollow tile and slag roof.

Dwelling, 1722 Pine street, \$3,500. (O & C), M. R. M. Samback, 1722 Pine street.

Brick 1 story, 12x15, and interior alterations.

Factory, 153 North 10th street, \$2,500. (O), Julius Sostman, 526 South street. (C), Frank English, 1608 North Carlisle street. Repair fire damage.

Garage, 47th and Westminster avenue, \$1,100. (O), F. G. Vogt & Sons, 30th and Race streets. (C), John P. Fallon, 442 South 60th street. Brick, 1 story, 60x80, slag roof, fire doors and alterations.

Storage, Frankford avenue and Pennypack Creek, \$10,000. (O), Summerdale Dyeing and Finishing Co., Holmesburg. (C), J. A. Hand, 8029 Frankford avenue. Brick, 1 story, 47x103, slag roof.

Garage (rear), 722 Pine street, \$1,700. (O), Adolph Kempler, 722 Pine street. (C), Cerasoli & Scuri, 1218 Catharine. Brick, 1 story, 18x15, and alterations.

Store and Dwelling, 4929 North Broad street, \$3,000. (O), M. L. Kemmerer, 4929 North Broad street. (C), EE. J. Kreltzburg, 1345 Arch street. Brick, 1 story, 20x20, and alterations.

Dwelling, 4956 Chestnut street, \$1,000. (O & C), Wm. H. Windolph, 4956 Chestnut street. Interior alterations.

Store and Dwelling, 3244 Egewater street, \$325. (O), Chas. Paska, 3244 Edgewater street. (C), C. Schoudelemeyer, 3042 Salmon street. Alterations.

Garage, "J" and Estaugh streets, \$2,000. (O), Luthlin & Co., "J" and Estaugh streets. (C), Robt. Beatty Co., 2321 East Fletcher. Brick, 1 story, 21x30, slag roof and cement floor, alterations to present stable.

Store, 923 Walnut street, 4,000. (O), Estate of Julius Wallner, 923 Walnut street. (C), Lam Building Co., 1001 Wood street. Fire repair.

Shed, 2635-37 West Huntingdon street, \$300. (O), Francis Raney, 2635-37 West Huntingdon street. (C), Geo. Moehls, 2631 North 28th street. Brick, 1 story, 20x25, slag roof.

Dwelling and Store, 740 South 20th street, \$1,750. (O), B. Fisher, 740 South 20th street. (C), A. McTavish, 1515 Pine street. Brick, 2 story, 6x16 and a 3rd story addition, 6x6, interior alterations.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

THE PERIDIOTIC COTTAGE—A Foil for the Bungle-Ode.

By Arthur S. Heineman, Architect.

In a recent issue, I read the truth about the Bungle-Ode, and I am minded to discourse upon the Peridiotic or Colonial type of cottage.

The Peridiotic cottage is designed by an archi-choke, and by the time it is completed the owner invariably hopes that he will or has.

As all are aware, period things had their origin in the Orders. The Orders were taken—not given—and the incubation of the Peridiotic cottage involves the "following of Orders if it breaks masters!"—and it usually does. These houses are done in a style or type of architecture, and by the time the modern needs are shaped to the ancient style the

cottage achieves all its Peridiotic appendages.

An ancient proverb sayeth: "Hew to the line, let the quips fall where they will," and "there's a destiny which shapes men's ends, rough hew them how we may." The appendages of a Peridiotic style of architecture and decoration, when dwarfed into a modern cottage, do enough to the destiny of the architect without the rough hewing that the client does to him.

So much as to effect. Now as to caws:

Exteriorly speaking, over the front door is placed a deleted eyebrow—arranged to shed not even a tear.

The front porch is provided with a guard

rail, so that the opening of the front screen door won't catapult the porch occupant onto the flower beds.

Above the front door is a fan window—baseball parlance—meaning it doesn't make a hit.

From the exterior the windows are arranged symmetrically, equally spaced, and the spaces equally divided, so that you are constantly reminded that the architect had a tape line—and used it. In fact, that is the principal impression you get—the measured-off effect—and each time you pass and re-pass the house you measure it up with your eye, hoping to find that they slipped up an inch or so and that you may go and tell the architect about it.

And the windows are all full of panes, and the housewife has to take still more pains to keep them clean. Generally they are in squares, like a checkerboard, and the flies learn to jump from square to square—sort of speculating on them.

This symmetrical arrangement of the windows on the exterior has a sporadic effect on the interior. The windows are sort of silly-metrically in the rooms. Everything in the room is what you might call in profile—or three-quarter-wise—because of those windows. They pop up in all sorts of places, and wherever you expect and hope and want a wall to be—there's your window; and where you really want a window—for a beautiful view or a charming vista into a pergola or something—why, there's a nice, full-sized, transparent section of plastered wall.

The best thing about the living rooms with the windows arranged symmetrically for the exterior is the wall spaces. Pianos, particularly baby grands, if intended for use, are hung with chains from the ceiling. It's the only way to place them in the room and not disturb the sillymetricity of those windows.

Outside and adjoining and abutting and bounding those windows are shutters—green ones. The shutters might be called openers. At least they are never shut; usually they can't shut; but they are ornamental and decorative and cute. It's a case of form following function, just like the nose ring of a cannibal—ornamental, decorative, cute, and oh! so functional!

Most of these Peridiotic cottages have eaves—no overhangs and exposed rafter ends—oh, dear, no. Nothing so vulgar and indecently exposed as that! Just nice, smug, useless, and enclosed Eaves. Too short to protect the walls and windows from the beating of the summer sun; too short to save the windows from the driving of the semi-tropic rains; not wide enough to create an air eddy as under the broader overhang which pulls the heated air from the room; just a dear, chopped off, useless—snub-nosed Eve—designed in the paradise of its own misunderstood function, because A-dam architect is wedded to it.

The other parts of the interior of the house

are really very livable; and if you can forget and forgive its effect of Prunes, Prisms and Priscillas, and the hard-and-fast four-squaredness of it—you can, by the use of modern touches and the expression of your own free soul, in the choice and arrangement of furnishings, really live along very sweetly and independently.

True, the life of peace and independence is not always compatible with period type residences, but the cottages as a class escape the fungus of varying and multi-period rooms which usually clusters the larger houses of this type. I have passed through dwellings herein each room was done—well done, one might say—in a different period of architectural and decorative treatment—one of those houses, you know, of which the decorator proudly boasts that the owner gave him *carte blanche*—and I, for one, am all fed up on decorator's "*carte blanche*" houses. As you go from room to room, to avoid the blind staggers you must make a complete metamorphosis, and if, like tabby, you have nino perfectly good and husky lives, you may survive. As you are conducted through a Victorian hall, a Baronial dining-room, then a Louis Quintz salon, mein host's daughter, affecting to live up to her surroundings, lifts pince-nez and says, "*Je ne sais pas*," to which you reply, "*No, I didn't see your pa, but there's a hell of a lot of other queer-looking things here.*"

Period rooms, abutting and abounding in one defenseless house, are nothing but cheap sensations, artificially produced—a sort of second-hand realism—and realism is vulgarity under a mask of authority.

The use of well-chosen words to conceal one's meaning is the very apex of oratory; hence the above.

From all the great and unblushing world truths that have gone before the reader may have concluded that the Peridiotic cottage is wholly without merit. Such an assumption would be well founded were it not for the barrage of protecting and saving qualities about to be divulged:

The saving genius of the Peridiotic house is the housewife. Battling like a Greek at her Thermopoli, though she sells dearly her long cherished ideals of livableness and homelikeness, she must be entirely annihilated by architectural barbarism before she will sacrifice the stronghold of convenience. And preferring a living client to a dead prospect, the architect, not unmindful of his fee, sacrifices art for art's sake, and fills the cottage with the thousand and one contrivances and conveniences that have made the bungalow—love's hand maiden—the children's paradise—and the old maid's temptation.—"The Architect and Engineer."

The "Builders' Guide" is in its thirty-third year of continuous publication.

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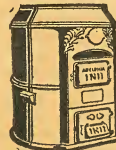
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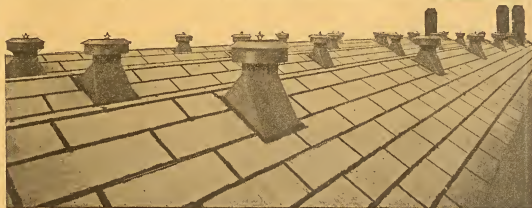
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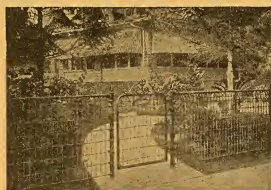
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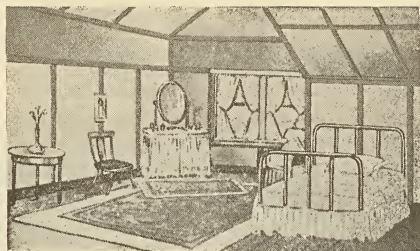
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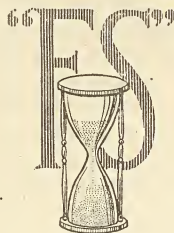
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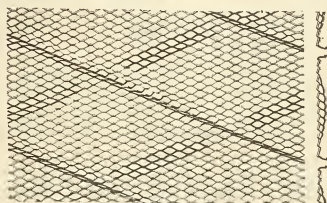
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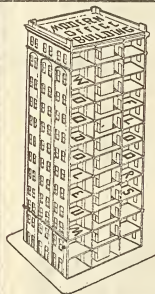
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Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 24

PHILADELPHIA
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BUILDERS' GUIDE

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As The Editor Sees It



THE American Institute of Architects has taken another step toward solving the House Problem for America. The architects have assumed the greater part of the burden of this problem, but they realize that the principles at stake involve laws and conditions which must be corrected by society at large, and until the people, as a whole, realize the responsibility which devolves upon them in this most vital question of our public life, the efforts of the architects will be in vain.

In an attempt to accomplish this end there will be conducted by the *Journal of the American Institute of Architects* and the *Ladies' Home Journal* an American competition for the best solution of the House Problem:

While the indispensable contribution which architecture has to make to the world-wide problem of the house is of the highest importance, the experiences of the last half-century, in all the leading nations of the world, have demonstrated beyond further doubt that society must now and in some manner grapple with and correct those fundamental economic laws which have produced their cycles of congestion and slums in all our communities. Until this is done, architects cannot take any great part in the solution of the house problem, the present acuteness of which has been so greatly emphasized and demonstrated by war.

While the numerous "small-house" competitions of the past have done much toward stimulating an interest in the

question and have exercised a certain influence upon a small fragment of our small-house development in this country, they have contributed nothing at all toward an ultimate and more universal answer to that question which they only approach in a superficial way. Land and building speculation continue to be the prime motives behind all housing undertakings, with the exception of those where there is sought a certain result which may be measured in terms of labor stability.

As a result, we are continually piling up a more and more mountainous barrier between society and the democracy we profess to seek, while our communities, one and all, are given over to speculation, to congestion, and to all the evils of our unchecked policy of development, in which the individual is permitted to take his profit, no matter what loss or damage he may cause the community.

With these bald facts now staring us in the face—with the known condition of landlordism to which the United States has descended as though inexorably doomed to the fate of other nations—with the knowledge of that huge loss in time and money in our war-making activities, due to bad housing and no housing—with the certainty that as a nation we must now boldly face this insistent social and economic problem with which the future of the United States is indissolubly bound up, the *Journal of the American Institute of Architects* believes that the time has come when we must cease

the futile application of philanthropy and charity to the house problem, discontinue the hopeless attempt to solve the problem by restrictive legislation alone, and offer a positive and constructive program which may in some manner serve as a basis for future effort.

To this end the *Journal* has organized a competition to be held along new lines and by means of which it is hoped that there may be created in the United States a more fundamental knowledge of all the factors which govern the problem of decent houses for all workers.

In order that this knowledge may have the widest possible diffusion, the *Journal* has arranged with the *Ladies' Home Journal* for the publication of the winning solutions of this competition in its pages as well as in those of the *Journal* of the Institute. The competition will be in three parts:

- Part I. The Social Purpose.
- Part II. The Economic Method.
- Part III. The Physical Plan.

All competitors will be required to submit the following:

Under Part I, a Thesis in which there shall be set forth the social purpose which house-building should seek to attain.

Under Part II, there must be described the proposed economic method of financing and administering the community to be created and maintained without likelihood of slums and the general deterioration which usually has accompanied unchecked private development.

Under Part III there shall be submitted

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a rough sketch plan to show the physical scheme of the proposed development. The prizes, which are offered jointly by the *Journal of the American Institute of Architects* and the *Ladies' Home Journal*, are as follows:

The winning solution	\$1,000
The second prize	500
The third prize	250
The fourth prize	150
The fifth prize	100

The competition is open to all citizens of the United States and Canada, who may enter singly or in groups as they desire. All treatises and plans must be sent prepaid to the office of the *Journal of the American Institute of Architects*, The Octagon, Washington, D. C., on or before October 31, 1918. No submissions will be accepted unless the requirements as to the three parts are fully complied with. A detailed program will be sent on receipt of request.

The jury will be as follows: Thomas R. Kimball, President of the American Institute of Architects, Chairman; Louis F. Post, Assistant Secretary, Department of Labor, Washington, D. C.; Thomas Adams, Town Planning Advisor, Commission on Conservation, Ottawa, Canada; Herbert Quick, Farm Loan Board, Washington; Lawson Purdy, Chairman Committee on New Industrial Towns, New York City; James Sullivan, Representative of the American Federation of Labor on the Council of National Defense, Washington, D. C.; Edith Elmer Wood, Legislative Authority, Philadelphia; Frederick L. Ackerman, Architect, New York City; Milton B. Medary, Jr., Architect, Philadelphia.

* * *

WE cannot fail to be aware of the seriousness of this great problem before us, and we are constantly reminded of the dire results of the situation as it now exists by such reports as these:

Desertion from Washington last month of 3,464 war workers, chiefly young women, has emphasized the need for speed in completion of the Government's housing program. So serious has the situation become, according to Major A. L. Potter, chief of the health and housing division of the war department, that he is recruiting an army of women missionaries to spread the gospel of "carry on" among homesick or dissatisfied women war workers. Lately women workers have been returning to their homes in increasing numbers. An average of 700 women a week, Major Potter said, are deserting their positions and greatly handicapping the war work of many departments.

* * * * *

According to a report made public by Fred A. Moore, sent here to make a

survey by the War Department under the direction of the war camp community service commission, says a Davenport, Ia., dispatch, it will be necessary to obtain 1,228 houses to properly care for the men at work upon government work on the arsenal. Of this number 56 per cent. is in Davenport, 28 per cent. in Rock Island, 12 per cent. in Moline, and 2 per cent. in miscellaneous. The total number of employees is 9,000 and to properly care for them 1,077 houses, 151 flats and 204 rooms are needed. Sixty per cent. of the employees are married and 3,231 of them have lived in the Tri-cities less than a year.

* * * * *

Manufacturing at Racine, Wis., is seriously curtailed because of the lack of labor in that city and the lack of labor is attributed to the lack of housing.

* * *

IN view of the great importance which we must attach to the Housing Problem, it is with the utmost interest and rejoicing that we read in the "Journal of the American Institute of Architects" a description of one of the first War Emergency Government towns for shipyard workers, by Richard S. Childs:

Yorkship Village is the name of the housing project of the Emergency Fleet Corporation for employees of the New York Shipbuilding Company at Camden, N. J. If it indicates the kind of Government housing that is to follow, we may all rejoice.

The site is an irregular tract of 225 acres of farm land on the outskirts of Camden, just within the city line near Gloucester and Westmount. It is shut off from Camden and Gloucester by a marshy brook. A highway with a new trolley leads to Gloucester, and a new road crosses the marshy land toward Camden. For all practical purposes, the site is an island—a feature with economic possibilities that we will consider later.

The entire tract has space for 2,400 lots. The present contract develops 90 acres and calls for the erection of 907 houses, some stores, apartments, and a theatre. Sewers, lights, and gas are being brought in from Camden, and Camden will supply a school. Work is well under way, and the town will doubtless be a living reality before summer ends.

Eleetus D. Litchfield, of New York, is the architect and town planner, and he desires that generous credit for assistance be given to his junior associate, Pliny Rogers.

Having a flat, unobstructed site, almost unconnected with other areas, Mr. Litchfield was able to draw his town plan on practically blank paper. His starting point was the new road from Camden, which he broadened to a parkway and terminated in a plaza and commercial center in the heart of the tract. At an angle he ran another parkway toward Gloucester, where is another shipyard; the rest was a matter of spinning a cobweb in such fashion as to avoid long weary lines in

favor of short closed vistas. He has not let his fancy run as far and free as the English planners did at Well Hall, where straight lines were studiously and completely avoided, even the edges of the sidewalks being made irregular, but his straight lines are short, and the end of the street or a turn of the way will always be in sight. As no thoroughfare cuts through the tract any way, the residential roads are secure from heavy traffic and will be quiet and safe. There are generous playgrounds, a spacious school site, and a space for gardening for workers who desire land for that purpose.

In the houses, Mr. Litchfield has drawn upon his successful experience with small houses at Jamaica, Long Island, and has devised a charming series of Colonial exteriors in brick and in stucco. The creation of a whole town in Colonial architecture will set a novel standard in town harmony!

It is hard to realize that these varied and attractive facades mask a type of small home, the endless monotony of whose exterior treatment makes Philadelphia so dreary to the eye! Long rows are avoided, the longest groups having eleven houses. There are 243 groups altogether, composed of 27 types of houses in 70 different combinations. Broken roof-lines are the rule. The ship-worker will not have to look at the number to identify his home in Yorkship Village!

The improvements on a typical lot will cost \$450, perhaps more; a typical house costs \$2,700. The bulk of the money is lent by the Government (Emergency Fleet Corporation) to the New York Shipbuilding Company, with provision for the transfer of the whole housing enterprise to a subsidiary corporation, the Fairview Realty Company, the stock in which is, for the present at least, in the hands of the shipbuilding company. Mr. Wallace Benedict, of the New York Shipbuilding Company, is the active manager of the project.

The contract with the Government makes the loan a first lien upon the property, charges 5 per cent. interest, and demands repayment of the principal at the rate of 3 per cent. a year. Houses may be sold and the parcel excepted from the blanket mortgage by paying off the due proportion thereof, and such a payment (rather illogically) may be counted as part of the general 3 per cent. amortization charge. There is no arrangement for continuing the Government loan as a separate little mortgage on such a parcel; private capital must be found to finance a worker who wants to purchase on a monthly installment plan. The private capital stock is forever limited to dividends of 5 per cent. cumulative, even after the Government gets its money back. In the period from two to five years after the close of the war, the realty company, if it has been unable to meet the Government's demands and to pay its 5 per cent. dividends, may secure an appraisal of the assets of the company by a board of arbitration, and the shrinkage up to 30 per cent. will be written off the Government loan and presumably re-

(Continued on Page 363)

Advance Construction News

SONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

School (add. and alt.), Broad and Duncannon streets, Philadelphia. Architect, George I. Lovatt, 416 Walnut street, Philadelphia. Owners, Holy Child R. C. Church, care of Rev. Wm. J. McCaffrey, on premises. Consists of completion of third-story rooms, mill work, plastering and painting. Architect is taking sub-bids.

Garage, Thirteenth street, near Oak Lane avenue, Philadelphia. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owner, C. E. Doan, Sedgwick, Pa. Stone, 2 stories, 26x25 feet, shingle roof, stone foundations, hot water heating, electric lighting, cement and yellow pine floors. Architect taking revised bids, due as soon as possible. Hogg Const. Co., 1634 Sansom street, and Nardi Co., 1228 Fitzwater street, are figuring.

Store and Office Building (alt. and add.), northwest corner of Fourth street and Girard avenue, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, on premises. Owner, Samuel Lerner, on premises. Brick, 2 stories and basement, 60x15 feet, addition, slag roof, reinforced concrete work, hot water heating, electric lighting, tile and marble work, cabinet work, cement work, metal fath, glazing, plastering, flush bulbs, ornamental iron work, hardwood floors. Owner is taking bids. L. Sverdlhoff, 228 South Fifty-ninth street, is figuring.

Rooming House, Eighteenth and Ridge avenue, Philadelphia. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Ridge Avenue Farmers' Association, on premises. Four stories, 46x56 feet. Plans in progress. Too early for details.

Store (alts.), Eighth and Fulton streets, Philadelphia. Architects, Henon & Boyle, 10 South Eighteenth street, Philadelphia. Owner, Frank C. Carbone, on premises. Brick and terra cotta (plumbing, heating, lighting and decorating reserved), marble work, cement and yellow pine floors, elevator, fire doors, skylights. Architects taking bids, due June 12th. Smith-Hardican Co., 1606 Cherry street, and Antonio Bressi, care of architects, are figuring.

Store House, Office and Oil House, Third and Erie avenue, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Reinforced concrete, brick and terra cotta coping, 1 and 2 stories, 66x83 feet and 26x44 feet, asbestos and slate roof, concrete, grapholite, pine and maple floors, steam heating, electric lighting, rolled steel sash, copper skylights, fire and metal doors, iron stairs, ornamental iron work, metal lath, elevators, wire work. Revised plans about completed. Owners will take bids in a few days.

Factory, Seventeenth and Cambria streets, Philadelphia. Architect, Charles E. Oelschlagger, 1615 Walnut street, Philadelphia. Owner's name withheld. Reinforced concrete, 4 stories, 175x230 feet, slag roof, reinforced concrete

floors, steam heating, electric lighting, rolled steel sash and skylights, fire doors, 4 elevators, waterproofing, sprinklers. Revised plans in progress.

Residences (24), Courtland and Marvine sts., Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, John P. McGinty, 2010 North Broad street, Philadelphia. Brick and stucco, 2 stories, 15x38 feet, asphalt and slag roof, stone foundations, hot water heating, combination lighting, hardwood floors. Plans about completed. Owner will take sub-bids.

Residence (alts.), 6396 Drexel road, Philadelphia. Architect, private plans. Owner, Walter L. Eckhardt, 1026 Chestnut street. Consists of partitions, minor changes to interior, new bath room, mill work, plumbing. Work contemplated.

Automobile Show Room and Factory, 3943 North Broad street, Philadelphia. Architects, Andrew J. Sauer & Co., 905 Chestnut street, Philadelphia. Owners, Haas Automobile and Supply Co., 4303 North Fifteenth street, Philadelphia. Brick, 3 stories, 20x110 feet, steam heating, electric lighting, hollow metal skylights, metal bulks. Plans in progress.

Garage, Fox Chase, Philadelphia. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owner, Horace W. Fenton, 7411 Second Street Pike. Brick, 1 story, 120x40 feet, slag roof, stone and brick foundations, hot water heating, electric lighting, cement floors, gasoline storage system. Owner is taking bids.

Building, East Columbia avenue, Philadelphia. Architect, C. E. Schermerhorn, 430 Walnut street, Philadelphia. Owners, Elisha Webb & Sons Co., 136 South Front street, Philadelphia. Brick, 1 story, 40x109 feet, slag roof, hollow metal skylights, electric lighting and plumbing (heating reserved). Architect has received bids.

Building for Housing Radio Tractors, Spec. 3054, and Building for Clothes and Shoe Repairing, Marine Barracks, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, Bureau of Yards and Docks, DeWitt C. Webb, Public Works, League Island Navy Yard, Philadelphia. Frame, 1 story, 100x56 feet and 32x160 feet, ready roofing, steam heating, electric lighting, plumbing, glazing. Owners taking bids, due June 12th. Wm. R. Dougherty, 1610 Sansom street; F. L. Hoover & Son, 1023 Cherry street; Wark-Yardley Co., 1757 Filbert street; W. O. Springer, 1624 Latimer street; J. Harry Roberts, Lansdowne, Pa.; Thos. C. Trafford, 1613 Sansom street; F. A. Havens & Co., 845 North Nineteenth street; Specht & Sperry, Heed Building; Thos. Little & Son, 1714 Moravian street; Lam Building Co., 1001 Wood street, and Monaghan & Losse, 3016 Chestnut street, are figuring.

Residence (int. alts.), 2231 North Thirty-third street, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner's name withheld. General in-

terior alterations, mill work, electric lighting, tile work. Plans in progress. Architect will take bids in about two weeks.

Warehouse (add.), 419-21-23 N. Eighth street, and 420-22-24 N. Franklin street, Philadelphia, \$16,000. Architect, private plans. Owners, Brown & Bailey Co., 410 N. Franklin street. Brick and frame, 1 story, 47x80 feet, 1 story, 56x56 feet, and 2 stories, 40x24 feet, slag roof, cement and wood floors. Contract awarded to R. C. Balinger & Co., 218 N. Thirteenth street.

Synagogue, 324-26 Fitzwater street, Philadelphia, \$8,000. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Mr. Burnstein, 235 Queen street, Philadelphia. Brick, 3 stories, rear addition, 22x40 feet, concrete foundations, slag roof, steam heating, electric lighting, tile and marble work, cement work, hardwood floors, leaded glass, metal ceilings. Owner will build.

Dwellings (6), 1101-1111 Robbins street, Philadelphia, \$8,400. Architect, private plans. Owner, Harry P. Harting, 7403 Bingham street, Philadelphia. Brick, 2 stories, 14x41 feet, slag roof, hot water heating, electric lighting. Owner will build.

Mill (alt. and add.), Nixon street and Leverington street, Manayunk. Architect, Albert C. Wood, Stock Exchange Building, Philadelphia. Owner, Wabash Mills Co., on premises. Brick and concrete, slag roof, cement floor, electric lighting, rolled steel sash (plumbing, heating, electrical work reserved). Architect taking bids due June 13th. Wm. J. Gruhler & Co., 219 E. High street, and E. L. Cuthbertson, 334 Roxboro avenue, are figuring.

Dwellings (27), Ashdale street and Lindley avenue, Philadelphia. Architect, private plans. Owner, Clyde A. Schuler, 1342 Wagner avenue, Philadelphia. Brick, 2 stories, 38x27 feet, slag roof, hot water heating, electric lighting. Owner will build.

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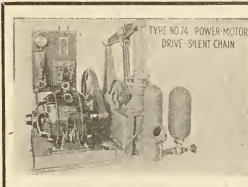
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Foundations, League Island, Philadelphia, Spec. #161, \$82,200. Architect, private plans. Owners, U. S. Government, care of C. R. O'Leary, Navy Yard, Philadelphia. Reinforced concrete, concrete foundations and piles for smithery, machines, equipment, timber piles, waterproofing. Contract awarded to Warren Moore Co., Colonial Trust Building, Philadelphia; time, 90 days.

Office and Warehouse, Sixth and Willow streets, Philadelphia, \$15,000. Architect, private plans. Owners, Philadelphia Match Sales Co., Sixth and Willow streets, Philadelphia. Brick, general interior alterations, slag roof, steam heating, electric lighting, metal lath. Contract awarded to Mitchell Bros., 2125 Race street.

Offices and Undertaking Building (alt. and add.), 1927-29 North Broad street. Architects, Price & McLanahan, Bellevue Court Building, Philadelphia. Owners, Samuel S. Armstrong & Son, on premises. Reinforced concrete, brick and stucco, 3 stories, 40x80 feet, slag and tin roof, stone foundation, steam heat, electric light, tile and marble work, rolled steel sash, fire and kalamein doors, iron stairs, ornamental iron work, canvas and slate roof, cement and parquetry floors, metal lath, wire work. Contract awarded to Pomeroy Const. Co., 1609 Ransstead street.

Residence (alts.), Queen street, west of Wishakion avenue, \$2,000. Architect, Lawrence Vischer Boyd, Harrison Building, Philadelphia. Owner, Mrs. Wm. L. McLean, on premises. Brick, 2 stories, side addition, interior alterations. Contract awarded to John W. Kohl, 100 North Fifteenth street, Philadelphia.

Residence (2 family), 6014 Catherine street, Philadelphia. Architect, private plans. Owner, H. Suchlesinger, 333 Walnut street, Philadelphia. Consists of interior and exterior alterations and general fire repairs. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Garage, 1139-41 North Twelfth street, Philadelphia. Architects, Andrew J. Sauer & Co., 918 Chestnut street, Philadelphia. Owner, Nass Estate, care of architects. Brick, 1 story, 40x60 feet, slag roof, stone foundations, steam heating, electric lighting, hollow metal skylights, mill work, ventilators. Contract awarded to Stewart Bros., 2526 North Orkney street, Philadelphia.

Delivery Building, Seventh and Filbert sts., Philadelphia, \$75,000. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Lit Brothers, Eighth and Market streets, Philadelphia. Brick, reinforced concrete, 1 story, 159x42 feet and 80x112 feet, corrugated roof, concrete floors, electric lighting, rolled steel sash, waterproofing. Contract awarded to Keystone State Const. Co., Franklin Bank Building.

Residence and Garage, 6435 Woodbine avenue, Philadelphia, \$18,000. Architect, W. Gordon Smith, 2115 North Sixty-third street, Philadelphia. Owner, John S. Gustine, Jr., 6337 Woodbine avenue. Brick and stucco, 2½ stories, 53x35 feet; garage, 22x25 feet, tile roof, hardwood floors, steam heating, electric lighting, tile work. Contract awarded to Milton W. Young, Overbrook, Pa.

Shed, 1826 East Venango street, Philadelphia, \$5,000. Architect, private plans. Owners, Ajax Porcelling Co., on premises. Hollow tile, 1 story, 100x40 feet, slag roof, stone founda-

tions. Contract awarded to H. H. Trump Co., Jenkintown, Pa.

Boiler House, City Line, Chestnut Hill, Philadelphia. Architect, private plans. Owner, St. Joseph's Academy, Chestnut Hill, Philadelphia, Pa. Brick, 1 story, 12x33 feet, slate roof, cement floors, electric lighting. Contract awarded to John McShain, 1610 North street, Philadelphia.

Garage (5), Fifty-fourth and Wynnefield avenue, Philadelphia. Architect, private plans. Owner, W. Percival Johnson, 4039 Lancaster avenue. Brick, 1 story, 16x21 feet, tin roof, stone foundations, steam heating, electric lighting, cement floors. Owner about to start building.

Theatre (alts.), Broad and Snyder avenue, Philadelphia, \$15,000. Architects, The Hoffman Co., Finance Building, Philadelphia. Owners, Broadway Theatre Co., on premises. New Marquise, pipe ducts under floors and cement floors, interior alterations. Contract awarded to Ketcham & McQuade, 1029 Brown street, Philadelphia.

Store Building, 140-142 South Fifty-second street, Philadelphia, \$5,500. Architect, Frank E. Jahn, 1112 Chestnut street, Philadelphia. Owner, Henry Felt, Fifty-second and Girard avenue, Philadelphia. Brick and steel, 2 stories, 40x49 feet, slag roof, stone foundations, steam heating, electric lighting, tile and marble work, hollow metal skylights, flush bulks, pine floors, metal lath and ceilings, dampproofing, ornamental iron work. Contract awarded to B. Bornstein, 1510 North Franklin street, Philadelphia.

Stock Building (alts.), Frankford Arsenal, Philadelphia, \$2,100. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. New steel partitions. Contract awarded to Ketcham & McQuade, 1029 Brown street, Philadelphia.

Service Building (alts.), southwest corner of Twenty-third and Chestnut streets, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, F. A. Poth Estate, Thirty-first and Jefferson sts., Philadelphia. Lessees, International Motor

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The confidence of this body of truck buyers is expressed by repeat orders—they know that the after-sale service placed at their disposal by the Autocar Company is an all-important factor in the efficiency and economy of their truck operation.

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This advertisement appears in the Saturday Evening Post of May 4th and the Literary Digest of May 25th

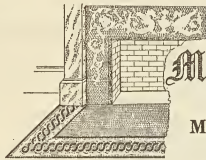
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Bell Phone,
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No Extra Charge, Main 3597

Brass, Copper, Steel and Galvanized Wire Cloth—Wire Window
Guards—Wire Partitions and Stock Room Enclosures—Coal
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Auto Truck Delivery to Philadelphia



Italian Marble Mosaic Co.

Manufacturers and Dealers in

Marble Mosaics, Terrazzo, Tiles and Ceramics

433 SPRUCE STREET

Warehouse, 432 Manning Street, Philadelphia

Both Phones

Co., on premises. Consists of general interior alterations, mezzanine floor, cement work. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

School (alt. and add.), Oak Lane, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Oak Lane Country Day School, Oak Lane, Phila-

delphia. Brick and stucco, 1 and 3 stories, 80x40 feet, 32x40 feet and 66x50 feet, slate and slag roof, cement and pine floors, metal lath, roof ventilators, stone foundations, tile work, fire escapes, ornamental iron work (heating and lighting reserved). Contract awarded to Specht & Sperry, Reed Building, Philadelphia.

PENNSYLVANIA Construction News

Residence, Wyomissing, Pa. Architect, L. D. Lance, Wyomissing, Pa. Owner, L. D. Douglass, Wyomissing, Pa. Brick and frame, 2 stories, 20x30 feet, single roof, pine floors, hot water heating, electric lighting. Plans in progress. Owner will take bids.

Residence and Garage, Wyomissing, Pa. Architect, L. D. Lance, Wyomissing, Pa. Owner, N. E. Richards, Wyomissing, Pa. Brick, 2 stories, 39x29 feet and 20x24 feet, slate roof, hardwood floors, vapor vacuum heating, combination lighting. Plans in progress. Owner will take bids in one week.

Store Building (alt. and add.), Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owners, Lord & Gage, care of Mr. Miller, Reading, Pa. Brick, 5 stories, plumbing, steam heating, electric lighting, hardwood floors, elevators. Owners taking sub-bids.

Houses (1000), Bethlehem, Pa. Architects, Zantzing, Borie & Medary, Otis Building, Philadelphia. Owners, Industrial Housing Commission, Department of Labor, Washington, D. C. Permanent type, 2 stories. Plans in progress. Too early for details.

Dormitory and Dining Hall, Essington, Pa. Architects, Duhring, Okie & Ziegler, Bailey Building, Philadelphia. Owners, U. S. Government, Emergency Fleet Corp., 140 North Broad street, Philadelphia. Frame, 1 story. Plans in progress. Too early for details.

Residence, Bryn Mawr, Pa. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owner, Mrs. Richard Taylor, care of architect, Brick, frame and stone, 2½ stories, 32x36 feet, shingle roof, pine floors (plumbing, hot air heating and electric lighting reserved). Architect taking bids, due June 13th. E. E. Hollenback, Inc., 1804 Bradywine street; H. H. Burrell, 206 South Quince street; Milton W. Young, Overbrook, Pa.; Gray Bros.,

Rosemont, Pa.; W. Powell Dilworth, Bryn Mawr, Pa. and Chas. C. Pace, Merion, Pa., are figuring.

Gun Plant, Midvale, Pa. Architect, private plans. Owners, Midvale Steel Co., Widener Building, Philadelphia. Brick, steel and concrete. Plans about completed. Owners will take bids in a few days.

Ammunition Filling Houses (2), Spec. 3006, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, Department of Navy, Bureau of Yards and Docks, care of C. W. Parks, Chief, Washington, D. C. Steel and wood, asbestos protected metal, 1 and 2 stories, 160x30 feet and 145x30 feet, composition roof, wood and cement floors, concrete foundations, vacuum heating, electric lighting, rolled steel sash, roof ventilators. Owners taking bids, due June 17th. Wark-Yardley Co., 1737 Filbert street, Philadelphia, is figuring.

Residences (4), bungalow style, East Christian avenue, Collingdale, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Frank Kuhnert, Collingdale, Pa. Frame and plaster and concrete, 2 stories, 16x38 feet, shingle roof, yellow pine floors, hot air heating, electric lighting. Plans in progress. Owner will take sub-bids in one week.

Pennsylvania Contracts Awarded

Apartments and Offices (alts.), Chester, Pa. Architect, private plans. Owner, Ed. W. Woolman, 4709 Lancaster avenue, Philadelphia. Brick and stone, 2 and 3 stories, tin and slag roof, pine floors, plumbing. Contract awarded to R. H. Seroggins, Chester, Pa.

Machine Shop, Chester, Pa. Architect, private plans. Owners, American Steel Foundry,

ARTESIAN WELLS DRILLED

Test Borings
Soundings

JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.



Chester, Pa. Brick and iron, 1 story, 20x30 feet, Lupton rolled steel sash. Contract awarded to R. H. Seroggins, Chester, Pa.

Residence (alt. and add.), Willow Grove, Pa. Architect, Walter H. Thomas, 134 South Fifteenth street, Philadelphia. Owner, W. W. Justice, Boyers Corner, Pa. Stone and brick, 2½ stories, various sizes, stone foundations, tin roof, oak floors (heating and lighting reserved). Contract awarded to W. John Stevens, Inc., Wynecote, Pa.

Residences (600), Chester, Pa. Architect, private plans. Owners, U. S. Shipping Board, for Sun Shipbuilding Co., Chester, Pa. Brick, 2 stories, slag roof, hot water and hot air heating, electric lighting, cement and yellow pine floors. Contract awarded to Wm. G. Price, Jr., Law Building, Chester, Pa., and W. Percival Johnson, 4039 Lancaster avenue, Philadelphia.

Nurses' Home, Phillipsburg, Centre County, Pa. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Phillipsburg Hospital, Phillipsburg, Pa. Brick, 3 stories, 56x32½ feet, slate roof, pine floors (heating, plumbing and lighting separate bids). Contract awarded to A. W. Gearhart, Phillipsburg, Pa.

Residence (alt. and add.), Haverford, Pa. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owners, Haverford College, Haverford, Pa. Stone and hollow tile, 1 story, slag roof, pine floors, new bath room and one room addition (heating reserved). Contract awarded to Herbert L. Walton, Morian, Pa.

Store Building (alts.), Norristown, Pa. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Kennedy's, Inc., 52 E. Main street, Norristown, Pa. Consists of interior and exterior alterations, metal bulks, hardwood flooring, etc. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

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Buy pure lime, 99% pure, no core, no grit. DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Phila. Both 'phones.

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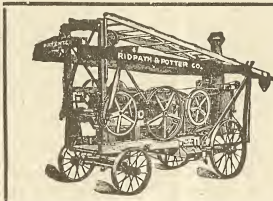
1629 Ludlow Street
Philadelphia, Pa.

THE
Hogg Construction Co., Inc.
1634 Sansom Street
Philadelphia

BUILDING Alterations
Additions
Construction New Buildings

"Personal Attention from
Foundation Walls to
Interior Trim."

GET OUR ESTIMATE BEFORE
AWARDING A CONTRACT



**We Drill Wells and Get Water
Test Borings and Soundings**

LET US SUBMIT PRICES

RIDPATH & POTTER CO

487 Bourse Building
Philadelphia, Penna.

work. Contract awarded to Consolidated Eng. Co. Baltimore, Md.

Barracks (for 240 men), New London, Conn. Spec. 2906. Architect, private plans. Owner, Department of Yards and Docks, care of C. Parks, Chief, Washington, D. C., for Fort Trumbull Reservation. Brick, concrete footing, 2 stories, 100x165 feet, composition roof, cement and composition floors, concrete foundations, steam heating, electric lighting, roof ventilators, damp-proofing. Lowest bid submitted by Matthew I. O'Connor, Northampton, Mass., \$78,960, 60 days.

NEW JERSEY

Construction News

Miscellaneous Construction News

Reservoir and Pump Wells, Yorktown, Va., \$750,000. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, 1317 F street, Washington, D. C. Reinforced concrete, steel and iron, terra cotta, hollow tile, tile and marble, plumbing, dampproofing. Contract awarded to F. W. Mark Cont. Co., Finance Building, Philadelphia.

Office Building, Wilmington, Del. Architect, E. Canby May, DuPont Building, Wilmington, Del. Owner's name withheld. Brick and concrete, 1 and 2 stories, 100x250 feet. Plans in progress. Too early for details.

Store (alts. and add.), 608 Market street, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owners, Schagrin & Braunstein, on premises. Brick, 3 stories, 24x24 feet addition, mill work, slag roof, pine floors, electric lighting, elevators. Architect taking sub-bids.

Bulkhead, Spec. 6158, Cape Henlopen Light Station, Delaware. Architect, private plans. Owners, Department of Commerce, Light House Service, office of Light House Inspector, Fourth District, T. J. Rout, inspector, Post Office Building, Philadelphia. Wood, 500x80 feet. Owners taking bids, due June 19th. Rust Eng. Co., Pennsylvania Building, and Willis-Ludwick Co., 34 South Seventeenth street, Philadelphia, are figuring.

Apartment (alts.), 1218 Market street, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Brick, 3 stories, general interior alterations. Contract awarded to Mr. Van Sant, care of architect.

Houses (531), Dundalk, Baltimore County, Md. Architect, Edw. L. Palmer, Jr., 513 N. Charles street, Baltimore, Md. Stucco, brick and concrete, 2 and 3 stories, various sizes, slate and felt roofs, cement and pine floors, hollow tile, steam calorific and pipeless hot air heating, electric lighting, waterproofing, wire

Residences (400), Gloucester, N. J. Architects, Bissell & Sinkler, Otis Building, Philadelphia. Owners, U. S. Shipping Board, for Pusey & Jones Co., care of C. S. Lee, Wilmington, Del. Brick and frame, 2 stories, various sizes, slag roof, pine floors, hot air and hot water heating, electric lighting. Plans in progress.

Church (alts. and add.), East Riverton, N. J. Architect, C. H. Wilson, 1931 North Twenty-second street, Philadelphia. Owners, St. Paul's Baptist Church, care of Rev. M. A. Foster, East Riverton, N. J. Brick, second story addition, 22x65 feet, slate roof, maple floors, hot water or vapor heating, combination lighting, mill and cabinet work, stained glass. Plans in progress. Architect will be ready for bids in two weeks.

Ship Yard Buildings, Gloucester, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Includes office buildings, machine shops, riggers' lofts, paint shops, warehouses, shelter buildings, galvanizing plant, etc. Plans in progress. Will take bids in about two weeks.

Assembly Hall, Jamesburg, N. J. Architect, F. H. Bent, State House, Trenton, N. J. Owner, State of New Jersey, Board of Managers, State Home for Boys, Jamesburg, N. J. Brick and steel trusses, 1 story, 68x123 feet, slate roof, steam heating, electric lighting, metal lath. Owners will advertise for bids in about two weeks.

Sewage Disposal Plant, Bordentown, N. J., \$5,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, Normal Training and Industrial School for Colored Youths, Bordentown, N. J. Reinforced concrete and steel, 17x24 feet, 6 feet deep, pine and terra cotta, waterproofing. Architect taking bids due June 18th. W. J. Warren, Princeton, N. J.; New York Sew-

age Disposal Co., 37 E. Twenty-eighth street, New York City, and Thos. Day, Trenton, N. J., are figuring.

Residence, Titusville, N. J., \$6,000. Architect, Harry Hill, State street, Trenton, N. J. Owner, Dr. Chas. H. Dilts, Broad Street Bank Building, Trenton, N. J. Frame, 2 stories, 38x30 feet, shingle roof, stone foundations, vacuum heating, electric lighting, pine floors. Owner taking bids. Harry Hilton, Trenton, N. J., is figuring.

School (alt. and add.), Trenton, N. J., \$17,500. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, and (2) wings, 24x24 feet, steam heating. Work contemplated.

Double Tenement House (repairs), Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, Manual Training and Industrial School for Colored Youth, care of Board of Education, Trenton, N. J. Frame & stucco, 2½ stories, 27x45 feet, shingle roof, steam heating, electric lighting. Architect taking bids due June 18th at 11:30 A. M. C. V. Barlow and Thos. Day, both of Trenton, N. J., and Chas. Fennimore, Bordentown, N. J., and W. J. Warren, Princeton, N. J.

Hospital (add.) (Dining Hall and Sleeping Quarters), \$90,000, Trenton, N. J. Architect, F. H. Bent, State House, Trenton, N. J. Owner, State of New Jersey, Board of Directors, State Hospital for Insane, Trenton, N. J. Brick or stone, 3 stories and basement, 40x170 feet, slate roof, fireproof floors, vacuum heating, electric lighting. Plans completed. Architect ready for bids.

Superintendent's Cottage, Bordentown, N. J., \$7,500. Architect, F. H. Bent, State

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Capitol Building, Trenton, N. J. Owner, Colored Industrial School, care of Principal Valentine, Bordentown, Brick, 2 stories. Plans in progress. Too early for details.

Store Room, Vineland, N. J., \$17,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, State Home for Feeble-Minded Women, Vineland, N. J. Brick, 1 story, 50x64 feet, slag roof, yellow pine floors, electric lighting. Architect taking bids due June 24th. C. V. Barlow, Trenton, N. J., and Geo. W. Shaner & Son, Palmyra, N. J., are figuring.

Administration Building and Superintendent's House, Bordentown, N. J., \$12,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, Manual Training and Industrial School, Bordentown, N. J. Brick, 2½ stories, 117x20 feet, and (2) wings, and 50x19 feet, shingle roof, steam heating, electric lighting. Owners taking bids due June 18th at 11.30 A. M. C. Y. Barlow, Thos. Day, both of Trenton, N. J.; Chas. Finnemore, Bordentown, N. J.,

and W. J. Warren, Princeton, N. J., are figuring.

School, Juliustown, Burlington Co., N. J., \$7,000. Architect, Harry Hill, Trenton, N. J. Owner, School Board of Juliustown Township, Frank Bozarth, Clerk, R. F. D., Burlington, N. J. Frame, 1 story, 75x40 feet, pine floors, waterbury heaters. Lowest bidder, E. W. Esham, Mt. Holly, N. J.

Store and Dwelling (alt. and add.), Home avenue and Beatty street, Trenton. Architect, Wm. A. Klemann, First National Bank Building, Trenton, N. J. Owners, Messrs. Rednor & Kline, on premises. Brick, 2 stories and basement, pine floors, electric lighting, tile work, hollow metal skylights, flush bulks, metal ceilings (lighting fixtures reserved). Contract awarded to Putchart & Gars, Trenton, N. J.

Ways (5), Bulkheads, Wharves, Docks, etc., Gloucester, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Timber and concrete piles, concrete, brick and steel work. Contract awarded to Armstrong & Latta, Land Tile Building.

Chestnut Hill, Pa. Alterations.

Offices, Margaret and Bermuda sts., Philadelphia, \$7,000. Barrett Mfg. Co. (O), Margaret and Bermuda sts., Philadelphia. R. Raff & Co. (C), 1638 W. Thompson street, Philadelphia. Frame, 2 stories, 88x27 feet.

Dwelling, 166 Grape street, Philadelphia, \$500. M. Duval (C), 4100 Manayunk avenue, Philadelphia. L. Basara (O), on premises. Brick, 1 story addition, 14x18 feet, stone foundations, tin roof.

Church, 19 S. Tenth street, Philadelphia, \$1,000. St. Stephen's Church (O), 19 South Tenth street, Philadelphia. Jos. Price (C), 2048 Rittenhouse street, Philadelphia. Consists of alterations.

Dwelling, 2456 N. Sixteenth street, Philadelphia, \$600. D. Klebanoff (O), 1546 W. Cumberland street, Philadelphia. Benj. Klebanoff (C), 1645-47 Federal street, Philadelphia. Brick, 1 story addition, 12x11 feet, stone foundations.

Store, 1023 Market street, Philadelphia, \$600. The Hare Estate (O), 1023 Market st., Philadelphia. H. E. Grau Co. (C), 1707 Sanson street, Philadelphia. Consists of interior alterations.

Dwelling, 1231 S. Juniper street, Philadelphia, \$300. D. Labella (O and C), on premises. Brick, 2 stories, 11x11 feet, slag roof, stone foundations.

Store, 1017 Market street, Philadelphia, \$900. Receivers of the Earle Store (O), 1017 Market street, Philadelphia. Percival M. Sax, (C), Franklin Bank Building, Philadelphia. Consists of interior alterations.

Dwelling, 2043 W. Indiana avenue, Philadelphia, \$400. S. Andonuzzi (C), on premises. Philip Di Giaccone (C), 2036 W. Clearfield st., Philadelphia. Brick, 1 story addition, 15x5 feet, stone foundations.

Garage, 2821-23 N. Eleventh st., Philadelphia, \$300. Miss Emma Klopfer (O), 2319 N. Eleventh street. Chas. W. Poppe (C), 2327 N. Eleventh street, Philadelphia. Alterations. Garage, Grays Ferry road, east of Twenty-ninth street, Philadelphia, \$1,200. Henry Bower Chemical Co. (O and C), Twenty-ninth and Grays Ferry road, Philadelphia. Brick, 1 story, 60x21 feet, slag roof, concrete foundations.

Buildings (2), 371-73 Martin st., Philadelphia, \$400. John McCrudden (O), 271 Martin st., Philadelphia. Wm. L. Leutz (C), 239 Roxborough avenue, Philadelphia. Brick, 1 story, 16x10 feet, slag roof.

Mfg. Bldg., Margaret and Bermuda streets, Philadelphia. Barrett Mfg. Co. (O), Margaret and Bermuda streets, Philadelphia. A. R. Raff Const. Co. (C), 1635 Thompson street, Philadelphia. Reinforced concrete, 1 story, 110x90 feet.

Dye House, Mascher and Turner sts., Philadelphia, \$400. D. M. Hess Estate (O), Mascher and Turner sts., Philadelphia. Volcome Dye Works (C), Mascher and Turner sts., Philadelphia. Brick, 1 story, slag roof.

Telephone Exchange, Germantown and Chelten avenues, Philadelphia, \$4,000. Bell Telephone Co. (O), Seventeenth and Arch streets, Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Interior alterations.

Store, Seventh and Mifflin streets, Philadelphia, \$1,060. Mrs. Carolina Rosenbaum (O), on premises. Mex. Cotler (C), 132 N. Forty-second street, Philadelphia. General alterations, flush bulks.

Store and Dwelling, 1330 Jackson st., Philadelphia, \$350. Daniel J. Desmond (O), 1330 Jackson st., Philadelphia. Lewis Eualzky (C), 2447 S. Tenth street, Philadelphia. Alterations.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garages (2), 5413-22 Wynnefield ave., Philadelphia, \$2,000. W. F. Johnson (O and C), 4029 Lancaster ave., Philadelphia. Brick, stone foundations, 1 story, 16x21 feet, tin roof.

Garages (3), 2406-08-12 North Fifty-fourth street, Philadelphia, \$3,000. W. P. Johnson (O and C), 4039 Lancaster avenue, Philadelphia. Brick, 1 story, 16x21 feet, stone foundations, tin roof.

Garage, 203 Ashdale street, Philadelphia, \$540. J. Wichel (O), 202 Ashdale street, Philadelphia. Francis J. Blatz (C), 5007 N. Fifth street. Brick, 1 story, 16x15 feet, stone foundations.

Garage, 5418 Westford road, Philadelphia, \$800. John Belzold (O), 5415 Westford road, Philadelphia. Alfred Steinhausner (C), Geneva and Westford avenue. Brick, 1 story, 12x20 feet, asphalt shingle roof, stone foundations.

Garage, 5428 Westford road, Philadelphia, \$800. John Zerrer (O), on premises. Alfred Steinhausner (C), Geneva avenue and Westford road, Philadelphia. Brick, 1 story, asphalt shingle roof, 12x20 feet, stone foundations.

Garage, 5325 Rising Sun avenue, Philadelphia, \$800. Wm. Meimel (O), on premises. Alfred Steinhausner (C), Geneva avenue and Westford road.

Garage, 309-11 Fitzwater street, Philadel-

phia, \$15,000. J. Frank (O), 418 Fitzwater street, Philadelphia. A. Shestack & Son (C), 528 Reed street, Philadelphia. Brick, 1 story, 37x63 feet, stone foundations, cement floors.

Dwellings (2), 751-53 S. Fourth street, Philadelphia, \$12,000. J. Frank (O), 418 Fitzwater street, Philadelphia. A. Shestack & Sons (C), 523 Reed street, Philadelphia. Brick, 3 stories, 19x27 feet, slag roof.

Offices and Stores, Fifty-second and Walnut streets, Philadelphia, \$19,000. Daniel Evans (O), Fifty-second and Walnut streets, Philadelphia. Rush Bros. (C), 1100 Fillmore st., Philadelphia. Brick, 2 stories, 40x47 feet, hot water heating.

Garage, 3455 N. Mascher street, Philadelphia, \$400. F. Novakoski (O), 3455 N. Mascher street, Philadelphia. Thos. Ostrowski (C), 2840 N. Mutter street. Brick, 1 story, 15x15 feet, slag roof, stone foundations, cement floors.

Garage, 2340 S. Third street, Philadelphia, \$1,000. A. Finkleman (O), 2340 S. Third st., Philadelphia. J. Hyman (C), 360 Ritner st., Philadelphia. Brick, 2 stories addition, 18x17 feet, concrete foundations.

Garage, 475 W. Hermitage street, Philadelphia, \$500. F. J. Graves (O and C), 4755 W. Hermitage street, Philadelphia. Brick, 1 story, 16x30 feet, stone foundations, slag roof.

Consists of alterations.

Dwelling, 87 Bethlehem pike, Philadelphia, \$400. Mrs. M. B. Hamilton (O), on premises. Alexander Caie (C), 48 E. Chestnut ave.,

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Warehouse, 212 Church street, Philadelphia, \$2,500. National State Bank of Camden (O), 223 Market street, Philadelphia. A. P. Fraim (C), 319 Market street, Philadelphia. Con-

sists of alterations.

Dwelling, 87 Bethlehem pike, Philadelphia, \$400. Mrs. M. B. Hamilton (O), on premises. Alexander Caie (C), 48 E. Chestnut ave.,

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.** Tasker Street Wharf, Delaware River, Philadelphia.

Dwelling, 1426 N. Thirteenth street, Philadelphia, \$1,900. Thos. Hyde & Sons (O), 1437 N. Thirteenth street, Philadelphia. Heist & Doherty (C), 1216 N. Eleventh street, Philadelphia. Alterations, stone foundations.

Storage Building, 217-19-21 Dock st., Philadelphia, \$2,800. John Middleton Sons (O), 219 Walnut street, Philadelphia. H. C. Dahl (C), 231 S. Eighth street, Philadelphia. General interior alterations.

Stores, Broad and Jackson streets, Philadelphia, \$875. Abe Gravitzky (O), Broad and Jackson streets, Philadelphia. Frank & Kniser (C), 1517 S. Sixth street, Philadelphia. Alterations.

Garage, 801-03 S. Seventeenth street, Philadelphia, \$1,200. Geo. Haines (O and C), 1619 Catherine street, Philadelphia. General interior alterations.

Dwelling, 608 W. Cliveden street, Philadelphia, \$3,800. Harrison I. Potts (O), 608 Cliveden st., Philadelphia. Wm. C. Wright (C), 22 Harvey st., Philadelphia. Porch addition, slag roof, cement floors, tin roof, alterations.

Store and Dwelling, 740 S. Twentieth st., Philadelphia, \$1,750. B. Fisher (O), 740 S. Twentieth street, Philadelphia. A. MaxTavish (C), 1515 Pine street, Philadelphia. Brick, 2 story addition, 6x16 feet, alterations.

Boiler House, Thirtieth and Race streets, Philadelphia, \$1,025. Hoffenhaus (O), Thirtieth and Race streets, Philadelphia. Edwin Engle (C), 1239 E. Nevada street, Philadelphia. Boiler foundation.

Shop, 1808 N. Twenty-fifth street, Philadelphia, \$2,200. Joseph Albert (O and C), 1808 N. Twenty-fifth street. Brick, 2 stories, 21x25 feet, slag roof.

Dwelling, 1215 Spruce street, Philadelphia, \$5,000. E. C. Dale (O), 1215 Spruce st., Philadelphia, \$3,000. H. P. Werner (C), 3245 Germantown avenue, Philadelphia. Brick, 2 stories, 11x37 feet, slag roof.

Stack, 103 Sharpnack st., Philadelphia, \$400. Ranall Spinning Co. (O), on premises. Robt Mills (C), 2020 N. Eighth street, Philadelphia. Repairs to stack.

Store and Dwelling, 216 Shunk street, Philadelphia, \$525. M. Rosenfeld (O), on premises. Louis Cohn (C), 312 Kimball street, Philadelphia. Brick, two-story rear addition, 12x11 feet, tin roof, stone foundations.

Dwelling, 236 East Haines street, Philadelphia, \$350. T. DeLisante (O), on premises. John Cassella (C), 314 East Haines street, Germantown. Brick, two-story rear addition, 12x16 feet, stone foundations.

Baker Shop, 1325 Dickinson street, Philadelphia, \$500. C. Cini (O), on premises. V. Jamperi (C), 1216 South Twelfth street, Philadelphia. Brick, one-story addition, 16x15.6 feet, slag roof, stone foundations.

Dwelling, 204 Market street, Philadelphia, \$1,100. W. Malklamer (O), on premises. C. W. Swartley (C), 6335 Ridge avenue, Philadelphia. Brick kitchen, 12x14 feet, tin roof.

Sorting Room, 1724 Hancock street, Philadelphia, \$300. Kelly-Hughes Co. (O), on premises. John Humphrey (C), care of the owner. Brick, 1-story addition, 20x6 feet.

Store, southwest corner of Twenty-third and Chestnut streets, Philadelphia, \$4,990. F. A. Poth Estate (O), Thirty-first and Jefferson streets, Philadelphia. Lam Building Co. (C), 1001 Wood street, Philadelphia. Interior alterations.

Dwelling, 3341 Ridge avenue, Philadelphia, \$1,000. S. Borenbaum (O), 2416 North Thirtieth second street, Philadelphia. Louis Swerdloff (C), 228 South Fifty-ninth street. Brick, one-story addition, 12x10 feet, slag roof.

Store, 317 Spruce street, Philadelphia, \$4,850. David Salkind (O), 227 Race street, Philadelphia. Joseph Seebachmann (C), 1734

North Seventh street, Philadelphia. Three-story addition, 12x14 feet, stone foundations, steam heating, slag roof.

Gate House, southeast corner of Broad and Erie avenue, Philadelphia, \$300. Hoss-Bright Manufacturing Co. (O and C), Broad and Erie avenue. Iron, 1 story, asbestos roof.

Dwelling, 4993 Thompson street, Philadelphia, \$400. Frank George (O), on premises. John De Santo (C), 4913 Lancaster avenue, Philadelphia. One-story addition, 12x14 feet, flush bulks.

Manufacturing Building, 715-17-19 Arch st., Philadelphia, \$3,000. Estate of E. P. Morris (O), 119 South Fourth street, Philadelphia. L. Snyder & Son (C), 200 North Marvne st., Philadelphia. Alterations.

Dwelling, 114 Hermit street, Philadelphia, \$300. D. Gallagher (O), 114 Hermit street, Philadelphia. John J. Hurley & Co. (C), 4416 Cresson street, Manayunk. Brick, one-story addition, 12x12 feet, tin roof.

Dwelling, 4616 Wayne avenue, Philadelphia, \$900. Theo. Gorden Estate (O), 1106 Spring Garden street, Philadelphia. R. F. Marshall (C), 4213 North Sixth street, Philadelphia. Consists of interior alterations.

Store, 113 South Thirteenth street, Philadelphia, \$1,500. Louis Solto (O), 1328 Marshall street, Philadelphia. K. Jafa (C), 960 North Seventh street, Philadelphia. Brick, one-story addition, 4x24 feet.

Garage, 1508-10 Brandywine street, Philadelphia, \$5,000. H. B. Johnson (O), Fifteenth and Spring Garden streets, Philadelphia. W. S. Snyder (C), 4502 Springfield avenue, Philadelphia. Brick, 2 stories, 32x68 feet, wood roof.

Dwelling, 3635 Chestnut street, Philadelphia, \$1,200. Mrs. Hinchman (O), 3635 Chestnut street, Philadelphia. H. L. Lofin (C), 3510 Filbert street, Philadelphia. Brick, two-story addition, 17x17 feet, slag roof.

Restaurant, 1405 Ridge avenue, Philadelphia, \$300. Providence Life and Trust Co. (O), 409 Chestnut street, Philadelphia. A. P. Fraim (C), 319 Market street, Philadelphia. Consists of alterations.

Store, 1654 Rigge avenue, Philadelphia, \$5,600. Leighton McMullin (O), 1652 Ridge avenue, Philadelphia. J. Sims Wilson Co. (C), 1125 Brown street, Philadelphia. Consists of interior alterations.

Store, 2537 South Thirteenth street, Philadelphia, \$1,000. Eagle Tailoring Company (O), 2537 South Broad street. Mike Cylinder (C), 521 Mifflin street, Philadelphia. Consists of alterations.

Shed, 1826 East Venango street, Philadelphia, \$5,000. Ajax Processing Company (O), 1826 East Venango street, Philadelphia. H. H. Trump Company (C), Jenkintown, Pa. Hollow tile, 1 story, 100x4 feet, slate roof, stone foundations, slag roof.

Boiler House, City Line and Germantown avenue, Philadelphia, \$4,500. St. Joseph's Academy (O), Chestnut Hill, Philadelphia. John McShain (C), 1610 North street. Brick, 12x33 feet, slate roof.

Pump House, 2636-29 East Adams street, Philadelphia, \$600. American Eng. Co. (O), Aramingo and Cumberland streets. Philip Habbach Cont. Co. (C), Twenty-sixth and Thompson streets, Philadelphia. Consists of alterations, brick work.

Garage, 935-37-39 South Fourth street, Philadelphia, \$6,500. Samuel Spector (O and C), 418 Wolfe street, Philadelphia. Brick, two-story addition, 24x6 feet, interior alterations.

Store, 140-42 South Fifty-second street, Philadelphia, \$5,500. Henry Felt (O), Thirteenth and Chestnut streets, Philadelphia. B. Bornstein (C), 1510 North Franklin street, Philadelphia. Brick, two-story addition, 20x84 feet,

general alterations.

Tenement House, 6525 Germantown avenue, Philadelphia, \$1,800. John F. Conlin (O and C), 5340 Germantown avenue, Philadelphia. Brick, alterations.

Boiler House, 730 Rising Sun Lane, \$5,410. Adolph Weicht (O), 730 Rising Sun Lane. Coatesville Boiler Works (C), Morris Building, Philadelphia. New foundation of cement for boiler.

Work Shop, 3225 North Lee street, Philadelphia. H. Boone (O), 3225 North Lee street, Philadelphia. John W. Mortimer (C), 3024 E street, Philadelphia. Brick, 1 story, 16x30 feet, slag roof, concrete foundations.

Galvanizing Work, Firth, east of Gaul st., Philadelphia, \$3,000. Empire Galvanizing Works (O), on premises. Robert Beatty & Bro. (C), 2321 East Fletcher street, Philadelphia. Brick, one-story addition.

Platform, 5315 North Second street, Philadelphia, \$2,500. Mrs. George Brewer (O), on premises. S. R. Winters (C), 5315 North Second street, Philadelphia. Brick, 1 story, 11x43 feet, slag roof.

Garage and Store, 906-16 North Broad st., Philadelphia, \$3,300. Edw. M. Harries (O and C), 2214 Chestnut street, Philadelphia. Brick, 1 story, 120x90 feet.

Work Shop, 1620 Washington avenue, Philadelphia. Dougherty & Bachran (O), 1620 Washington avenue, Philadelphia. Conneen Const. Co. (C), 1737 Filbert street, Philadelphia. Brick, one-story addition, 11x35 feet, slag roof, stone foundations.

(Continued from Page 356)

funded likewise to any who may have purchased houses meanwhile. The foreclosure provisions are slow and lenient. The present generation of Fleet Corporation officials interprets the contract to mean: "Get along if you can. If you make money, use an amount up to 3 per cent. each year to repay the Government. Any excess beyond that goes back into welfare work or further improvement of the property. There will be no foreclosure if your management is competent and sincere. After the war, if building costs go down, leaving you face to face with a competition that you can't meet, or if a reaction in local industry leaves you with a deserted village on your hands, we will absorb the shrinkage as a cost of war and write it off the Government mortgage, making the property once more a sound business proposition, with all your arrears of dividends cleared up. Go ahead now, pick your own architect, show us the land and the plans for our O. K. and don't be afraid to make the place attractive to labor, so as to reduce the labor turnover which is now crippling the shipyards."

For the present, this contract is, I understand, typical of those emanating from both the Emergency Fleet Corporation and the housing organization under Mr. Eidlitz.

Locally capitalized corporations are insisted upon in all these projects because of the Government's reluctance to be a landlord, but, in cases like this, where the employer is the only available local capitalist, it creates the unfortunate embarrassment of making the employer the landlord, subject to the additional

friction with his employees that the relation of landlord and tenant so often involves.

On paper, at least, Yorkshipp Village faces a remarkable economic opportunity, an opportunity that is enlarged by its topographical isolation. The unearned increment cannot very seriously spill over its borders to the enrichment of lucky neighbors, or the enhancement of the business frontages of any adjacent community. Nobody can set up in business very near to Yorkshipp Village, for the wooded creek, with only one crossing, shuts off parasite developments and keeps within the tract the commercial land values that are due to be created by the spending money of a thousand prosperous workers. Mrs. Shipyard Worker will therefore spend her husband's pay mostly in Yorkshipp Village. The Camden business streets are too far away—a stiff walk or a roundabout trolley ride via Gloucester. Gloucester and Westmont are too small to outbid the markets of Yorkshipp Village itself. So the grocer and meatman and drygoods merchant and druggist and movie manager who seek the trade of the Yorkshipp Village people must come and jostle for elbow-room around the central plaza and pay good ground rents for the privilege. The land values thus created constitute the major part of the unearned increment that is to be expected, and while the residential lots may remain worth only about what they have cost, the business frontages will be worth five and ten times their original cost and may be valued in scores of dollars per front foot.

How much the increment will amount to is impossible to predict. But the cost of the land, with the land improvements, reckoning on 5,000 population, will be only about \$90 per capita, whereas the normal land value is at least double that figure for a high-grade industrial community like this, without allowing anything for the extra value conferred by the charm of Mr. Litchfield's architecture and town plan. The land value in Gary is \$743 per capita; in Lackawanna it is \$644; in New York, over \$1,000; in numberless towns of the size of Yorkshipp Village it runs from \$150 to \$450 per capita. If we take \$200 per capita as the Yorkshipp Village value, we have an increment of \$550,000, which at 5 per cent. gives an annual value of \$27,500. In other words, the owners could safely charge the people \$5.50 a year per head more land rent than the costs compel (assuming that house rents cover house costs).

Moreover, there are empty lots left within the 90 acres against which no street improvements have been calculated, the whole cost being calculated above against the 907 lots that will be occupied at once by houses. To these extra lots nothing further will be chargeable on the books except the original cost of the land. As to the section reserved for future development, its water and sewers need not cost nearly as much per lot as in the first contract. There is room for 2,400 houses alto-

gether, and if they are built and occupied, as it seems likely they soon will be, the cost of improved land per capita goes down and the market value per capita goes up, increasing the indicated increment to over \$1,000,000! That may seem fanciful to the builders of Yorkshipp Village, and we need not bet on it, but when a prosperous population of 12,000 suddenly goes to dwell on a rural farm, strange things are due to happen. The unearned increment at Lackawanna, which the Lackawanna Steel Company created (14,900 population), was \$6,788,000. Part of it, of course, is a speculative value, but it serves to make an increment of at least \$1,000,000 at Yorkshipp Village, with its ultimate 12,000 population, seem reasonable enough!

The annual value of that increment, if converted into revenue for the benefit of the community, would apparently add over 50 per cent. to the normal per capita income which Camden obtains from the general property tax.

As the dividends of the Fairview Realty Company are limited to 5 per cent. annually, the increment is safe from private exploitation so long as the Realty Company refrains from selling off any houses and lots to parties not similarly restrained. The Realty Company will probably charge no more rent than the costs compel, and thus will deliver the increment to the tenants in the form of rents that are lower than unrestrained private landlords would exact. A better way, if practicable, would be to charge normal rents, i. e., what other landlords in the region charge for equal accommodations. Thus, private construction, which is still badly needed, will not be discouraged, and the wage-scale of the employer will not have an unequal value, depending on whether a worker is lucky enough to get into Yorkshipp Village. Such a rental basis might drive up the wage-scale—it certainly would bring in a revenue in excess of all normal expenses. The community with its 50 per cent. extra revenue could do for itself a multitude of things along the lines of health, schools, and recreation that would make Yorkshipp Village as surely a garden city in a social sense as it is to be in the sense of physical attractiveness!

At all events, speculators must be excluded. While the war lasts they must not be permitted to get hold of these houses and take advantage of the continuing housing shortage to boost the rents to the maximum that the well-paid shipyard workers can stand. That would nullify high wages by high rents and restore the restlessness of labor and the high labor turnover, thereby delaying the ship program. Any Tory can see that!

But why not continue to prevent exploitation of the unearned increment after the war, too? Amortize the Government loans out of rentals, at least to the point where a private mortgage can be obtained to refund it! In other words, take advantage of the unique

non-profit-seeking origin of this town to sell the town on the installment plan to the tenants as a group, to be held in perpetual trust for their benefit be a limited-dividend corporation, like Letchworth, or the Co-Partnership Tenancy Societies of England.

SCHOLARSHIPS FOR SPECIAL HARVARD STUDENTS.

Harvard University offers for the academic year 1918-19 three scholarships for special students in the School of Architecture with an income of two hundred dollars each, this being the amount of the tuition fee. Each such scholarship is therefore practically equivalent to free tuition.

The scholarships will be awarded to those candidates who, having fulfilled all other conditions, stand highest in a competition in architectural design to be conducted by the University.

Candidates must apply to the chairman of the School of Architecture, Robinson Hall, Harvard University, Cambridge, Mass.

Candidates must have had a high school education or its equivalent; they must have reached the age of 21 years before the beginning of the academic year 1918-19; they must have had at least three years' experience as draughtsmen in architects' offices, and must bring the recommendation of their last employer. Applicants admitted to candidacy will be notified in time to take part in the competition.

NOW, LISTEN TO THIS—

It's a far cry from beets to cement, but—"Popular Mechanics" says that there is a by-product obtained in the manufacture of beet sugar from which cement can be made, according to a Paris report. In boiling beets to make the sugar there collects a thick scum which has been found to contain considerable carbonate of lime. The amount of calcium carbonate which can be obtained from 100,000 tons of beets is about 6,000 tons. When sufficient clay is added and the substance burned, a high grade of cement is obtained.

So perhaps the happy day will come when the contractor will buy a farm, plant it to sugar beets, sell the beets at a high figure for the sugar they contain, and then after he gets his check, store up the calcium carbonates for use in the manufacture of concrete buildings and highways.

It'll be a great time for contractors. However, for the present the cement companies will undoubtedly keep on doing business at the same old stands.—"Improvement Bulletin."

To be poor in a wealthy country, to be sick in a good climate, to be inefficient among a progressive people, is a sign of unwise educational methods. Such people were not taught to battle with the world or meet life's emergencies.—Thoreau.

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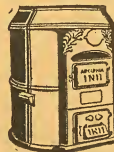
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June 19, 1918

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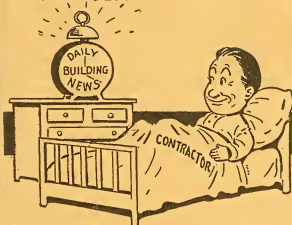
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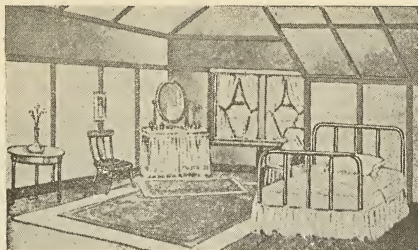
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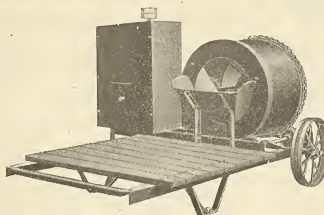
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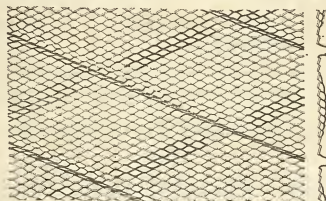
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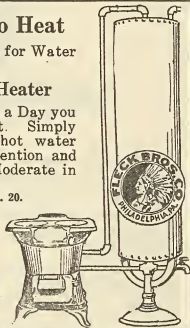
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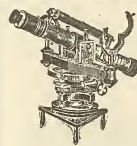
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Devoted to the Advancement of American Architecture, Structural
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Number 25

PHILADELPHIA
June 19, 1918

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As The Editor Sees It



FOLLOWING the hysteria among building trades, which resulted from the first announcement by Secretary McAdoo concerning building during the war, there prevails now a saner, optimistic view of the situation.

Many wrong interpretations have been read into Mr. McAdoo's words that

"Building operations which are not required to protect the health or provide for the comfortable needs of our people or to supply facilities necessary for the proper conduct of business essential to the successful prosecution of the war should be postponed."

It is not necessary to search for evidence that the building industry is most essential at present. From every hand come such reports as these:

Four hundred houses are needed immediately at Newport, R. I., for the use of torpedo ship employees, says a recent dispatch from that city. Of these 200 should be one-family cottages of from five to seven rooms each, and 200 apartment houses with accommodations for two families each. Something like 150 men go home to Fall River every night by train, returning to Newport to work early the next morning. They claim there are no suitable medium-sized low-rent houses to be had in Newport.

The Beaumont, Texas, Chamber of Commerce has inaugurated a campaign, the slogan of which is, "Build a rent house in Beaumont." The rapid growth of the shipbuilding industry there has created an acute shortage of houses, and

this is a local effort to provide accommodations for the workers.

A dispatch from Iliou, N. Y., says that war workers cannot be induced to come to or remain in that city if the housing facilities are not adequate. The Iliou Homestead Corporation has been created to rectify these conditions and, if all goes well, a considerable number of new homes will be constructed.

The Business Men's Association of Poughkeepsie, N. Y., have undertaken the formation of a \$100,000 development company to aid in attracting industries to that city. One of its first efforts will be to lease the vacant Fiat plant. The city is confidently looking forward to an industrial regeneration.

The Albany Home Building Company, Albany, N. Y., will shortly tender to the government, it is stated, through the Chamber of Commerce of that city, its service in the erection of homes for Government workmen. The company was recently incorporated with a capital stock of \$100,000.

Lowell, Mass., must have housing accommodations for 5,000 more war workers than it can accommodate now, Representative Rogers, of Massachusetts, told the housing division of the War Department at Washington several days ago.

Of course these conditions exist in the localities where great Government projects have attracted an increased number of workmen.

What can we say of those sections of the country where actual war work is not

a great factor. What will happen there if building does not go on. The answer is very simple—idle labor. It was estimated, according to Frederick L. Ackerman, in New York City alone prior to the war the annual labor turnover amounted to 8,000,000 per year, which means that 8,000,000 people were hired and fired and each lost approximately six weeks per year. During pre-war days the annual labor turnover in the United States was estimated at 125,000,000. Multiply by six and that product by the average wage per week and the result is the loss due to labor turnover. These rather staggering figures give us a conception of the great importance at this time of a satisfactory labor situation, and unemployed labor in one line which cannot easily be taken over by some other industry is a most dangerous element in the industrial situation of to-day.

Two other factors add to the desirability of a continuation of building at the present time. First, a great deal of material is available for private use which is not necessary for Government purposes; second, the nature of the building industry as compared with other industries, i.e., every well built house is a permanent addition to the wealth of a country, and has practically no depreciation, so yields most to the Government in the form of taxes.

* * *

In the firm belief that a rational view of the building situation is most impor-

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tant, we print the following letter from Secretary McAdoo to Senator Calder:

The Secretary of the Treasury,
Washington, May 11, 1918.

Dear Senator Calder:

From the proceedings of the Senate of May 9, 1918, Congressional Record, page 6755, you are quoted as saying:

"At no time in the history of New York have we needed more than at present new buildings for people to live in. We are prevented from having them to some extent because of the attitude of the Treasury Department in advising the banks and mortgage companies against loaning money upon mortgages on real estate. If the Treasury Department changed its attitude, the money could be obtained, new building would be encouraged, and we might then be able to help the housing problem we are facing here."

This statement is so wholly without foundation that I am amazed that you would make it. The Treasury Department has at no time taken any such attitude, nor has it ever advised banks or mortgage companies against loaning money upon mortgages on real estate.

I have advised against the construction of unnecessary buildings during the period of the war, but I have laid emphasis upon unnecessary building. I have stated publicly that:

"Where it is a question of need—be it on account of sanitary conditions or because without such new construction other operations essential at this time for the welfare of the country would suffer—there is no doubt that the work should be undertaken. This applies equally to construction work in cities and town and in farming districts.

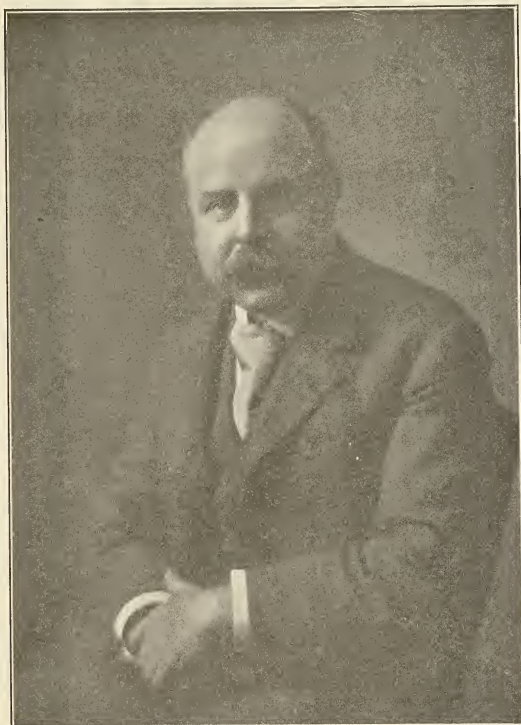
In a letter to Mr. Gompers, dated March 15, 1918, in reply to a resolution adopted by the Building Trades Council of San Francisco, I said:

"Building operations which are not required to protect the health or provide for the comfortable needs of our people or to supply facilities necessary for the proper conduct of business essential to the successful prosecution of the war should be postponed." I inclose a copy of that letter, also.

The attitude of the Treasury Department has been that capital which is needed during the period of the war should not be employed in the construction of unnecessary buildings at this time. But there has never been any suggestion that buildings actually needed for the health and protection of the civil population or for the conduct of essential business of the country should not be constructed during the period of the war.

Faithfully yours,

W. G. McAdoo.



FRANK MILES DAY, F. A. I. A.

Frank Miles Day, an architect of international reputation, died suddenly Saturday night. The degree of doctor of science in architecture was to have been conferred upon him to-day by the University of Pennsylvania. He received the degree of M.A. from Yale University in 1916.

If the firm of which Mr. Frank Miles Day was the head had accomplished nothing else of note but the very effective dormitory group at Princeton University, this one achievement would in itself have sufficed to stamp him an artist of unusual originality, refinement and distinction. When, in addition to this beautiful expression of his skill, one takes into account Mr. Day's work as the designer of such notable buildings as the Art Club, Horticultural Hall, the Crozer Building, the amphitheatre for the Medico-Chirurgical Hospital, the gymnasium of the University of Pennsylvania and the improvements in and about Franklin Field, residential halls at Cornell University, dormitories and dining halls at Princeton University and a large group of buildings

now being constructed at Wellesley College, it cannot fail to dawn upon one that Mr. Day embodied in a most attractive personality, a gift for delicacy of conception and artistry of execution representative of all that was best and most enduring in American architecture.

Frank Miles Day was born in Philadelphia on the 5th day of April, 1861, the son of Charles and Anna R. Miles Day. He was educated at the University of Pennsylvania, and after graduation in 1883, took a course at the South Kensington (London) School of Art and was admitted as a student at the Royal Academy. A considerable period of travel and sketching in picturesque highways and byways of Europe, in the course of which Mr. Day was enabled to become acquainted at first hand with the finest architecture in the Old World, antedated Mr. Day's return to the United States in 1886, where subsequently he entered actively upon the practice of his profession. In 1892 Mr. Day was joined by his brother, Mr. H. Kent Day, the firm being

(Continued on Page 376.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Apartment Houses (3). Forty-second and Walnut streets, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick and stone, 3 stories, 20½x75 feet, slag roof, marble trim, hot water heating, combination lighting, tile and marble work, hollow metal skylights, hardwood floors. Plans in progress.

Crane Shed, Building and Extra Siding, 907-935 North Ninth street. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Keystone Supply and Manufacturing Co., 921 North Ninth street, Philadelphia. Brick, steel, concrete and corrugated iron, 3 stories, 154x100 feet, composition roof, cement floors, stone foundations, elevators, rolled steel skylights, fire doors, ornamental iron work, wire work (elevator, heating and electrical work reserved). Architect taking bids, due June 20th. H. E. Baton, 1713 Sansom street; Wm. R. Dougherty, 1610 Sansom street; Smith-Hardican Co., 1606 Cherry street; Doyle & Co., 1519 Sansom street; Irwin & Leighton, 126 N. Twelfth street, and Lam Building Co., 1001 Wood street; Monaghan & Losse, Inc., 3016 Chestnut street, and Robert E. Lamb Co., 843 North Nineteenth street; Ketcham & McQuade, 1029 Brown street, are figuring.

Residences (42) north and south sides of Nassau street, between Sixtieth and Sixty-first street, Philadelphia (garages in basement). Architect, E. A. Wilson, 1208 Chestnut street, Philadelphia. Owner, James N. Mitchell, Forty-sixth and Market streets, Philadelphia. Brick and stucco (41) 2 stories, (1) 3 stories, 15x45 feet, tile, rubberoid and slag roofs, hot water heating, combination lighting, tile and marble work, cement work. Plans about completed. Owner will be ready for sub-bids in one week.

Store and Apartments (alts.) and Garage, 7234 Woodland avenue, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Matuk, 7234 Woodland avenue, Philadelphia. Brick, 3 stories, 40x70 feet, addition 40x30 feet, garage, 1 story, 16x20 feet, slag roof, yellow pine floors, cement work, mill work, hot water heating, electric lighting, tile work, flush bulks, metal lath, ornamental iron work, structural iron work. Plans about completed. Owner will be ready for bids in a few days.

Loft Building (alt. and add.), 150-52 North Fifth street, Philadelphia. Architect, Fred N. Griesler, Lafayette Building, Philadelphia. Owner, Joseph Shapiro, care of architect. Brick, concrete and steel, 4 stories, addition 30x40 feet, slag roof, stone and concrete foundations, steam heating, electric lighting, rolled steel sash, hollow metal skylights, fire door and tower, yellow pine floors, metal lath, electric elevator. Architect taking bids. Robins Const. Co., Lafayette Building, and Ketcham & McQuade, 1029 Brown street, are figuring.

Loading Racks, south of Passyunk avenue, Bridge Harbor and Wharf Lines of Atlantic

Refining Co., Philadelphia. Architect, private plans. Owners (Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Oak piles, steel work, 8 feet high, 80x230 feet, ornamental iron work. Owners taking bids. Wm. R. Dougherty, 1610 Sansom street, additional bidder.

Buildings (alts. and add.), Twenty-fifth and Spruce streets, Philadelphia. Architects, Day & Zimmerman, 608 Chestnut street, Philadelphia. Owners, Vulcan Mills, Cleveland Worst- ed Co., Allegheny avenue and Emerald street, Philadelphia. Consists of new office building, brick, 1 story, 24x30 feet, slag roof (2) fire towers, brick, rearranging toilet rooms, plumbing, (1) freight elevator. Architects taking bids (general), due June 19th. F. A. Havens Co., 845 North Nineteenth street; J. Sims Wilson Co., 1125 Brown street; George & Borst, 277 South Eleventh street, Philadelphia, and Wm. Wirtz, Camden, N. J., are figuring.

Power House, Sixteenth and Hunting Park avenue, Philadelphia. Architect, W. E. S. Dyer, Land Title Building. Owners, Bellevue Worsteds Mills Co., care of Benj. W. Greer, Wistar street and P. & R. R. R. Brick, steel and concrete, 1 story, 30x85 feet. Plans about completed.

Building, East Columbia avenue, Philadelphia. Architect, C. E. Schermerhorn, 430 Walnut street, Philadelphia. Owners, Elisha Webb & Sons Co., 136 South Front street, Philadelphia. Brick, 1 story, 40x109 feet, slag roof, hollow metal skylights, electric lighting and plumbing (heating reserved). Owners will build and are sub-letting contracts.

Garage, 1720-26 Callowhill street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Benj. Alexander, care of architect. Brick, 1 story, 62x115 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, gasoline storage system. Architect ready for bids.

Manufacturing Plant (alts. and add.), Twenty-fifth and Morris streets. Architects, Hoffman & Co., Finance Building, Philadelphia. Owners, American Galvanizing Co., Thirty-third and Gray's Ferry road. Plans in progress. Too early for details. Architects will take bids in about three weeks.

Building for Housing Radio Tractors, Spec. 3054, and Building for Clothes and Shoe Repairing, Marine Barracks, Navy Yard, League Island, Philadelphia. Architect, private plans. Owners, Bureau of Yards and Docks, DeWitt C. Webb, Public Works, League Island Navy Yard, Philadelphia. Frame, 1 story, 100x56 feet and 32x160 feet, ready roofing, steam heating, electric lighting, plumbing and glazing. Lowest bids submitted by T. C. Trafford, No. 1, \$4,248; No. 2, \$5,100; aggregate, \$9,149, 60 days. Edw. Fay & Son, No. 1, \$5,937; No. 2, \$4,385; aggregate, \$10,422, 60 days. F. A. Havens Co., No. 1, \$4,785; No. 2, \$5,943; aggregate, \$10,728, 35 days. Wm. R. Dougherty, No. 1, \$5,100; No. 2, \$6,040; aggregate, \$11,140, 30 days. Wark-Yardley Co., No. 1, \$5,650; No. 2, \$5,780; aggregate, \$11,155, 30 days.

Office Building, 1711-13-15 North Tenth st., Philadelphia. Architect, private plans. Owners, John E. Sjöström Co., on premises. Brick and terra cotta, 2 stories, 50x20 feet, slag roof, cement and maple floors, metal lath (heating and lighting reserved). Owners taking bids, due as soon as possible. H. H. Web- meyer, 509 West Cumberland street; Smith-Hardican Co., 1606 Cherry street; Stacey Reeves & Sons, 2011 Market street, and Raith Const. Co., 304 Master street, are figuring.

Apartment House (alts.), northeast corner of Broad and Norris streets. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, Estate of Anna Moore, care of architect. Brick, 3 stories, interior alterations. Plans in progress. Too early for details.

Warehouse, Fourth and Green streets, Philadelphia. Architect, private plans. Owner, A. H. Ladner, Inc., Fifth and Green streets, Philadelphia. Lessees, Harold McCalla Co., 444 Fairmount avenue, Philadelphia. Brick, 1 story, 60x180 feet, slag roof, concrete floors (heating and lighting reserved). Owners taking bids, due as soon as possible. F. B. Davis, 240 North Sixteenth street; E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia, and Margoli Bros., New York City, are figuring.

Library, Fifty-first and Chester avenue, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, Free Library of Philadelphia, Thirteenth and Locust streets, care of John Ashhurst, librarian. Brick, steel, terra cotta, limestone, 1 story and basement, 94x39 feet and 39x46 feet, slate, slag and tin roof, stone foundations, tile and marble work, metal lath, galvanized iron skylights, ornamental iron work, roof ventilators, waterproofing (heating and electrical work reserved). Architect taking bids, due June 28th. Frank G. Stewart, 1619 Sansom street; H. H. Burrell, 206 S. Quince street; F. W. Mark Cont. Co., Finance Building; Wark-Yardley Co., 1737 Filbert street; Pomeroy Const. Co., 1609 Ranstead street, and Wills-Ludwick Co., 34 South Seventeenth street, are figuring.

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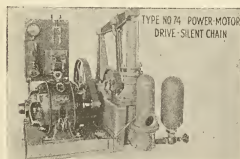
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Church (alts.), Eighteenth and Tioga streets, Philadelphia, \$3,500. Architect, private plans. Owners, Tioga M. E. Church, on premises. Brick arway and minor changes to basement. Contract awarded to F. E. Wallace, 1220 Chancellor street, Philadelphia.

Dwelling (add.), 4630 Frankford avenue, Philadelphia \$3,500. Architect, Horace W. Castor, Stephen Girard Building, Philadelphia. Owner, T. E. Castor, 4637 Penn street, Frankford, Philadelphia. Brick, side addition, 1 story, 16x48 feet, slag roof, flush bulks. Contract awarded to Wilson Milnor, 4637 Penn street, Frankford, Philadelphia.

Schools (2) (alts.), Taggart, Fourth and Porter streets, and School of Observation, Thirteenth and Spring Garden streets, \$2,600. Architect, J. Horace Cook, Nineteenth above Chestnut streets, Philadelphia. Owners, Board of Education, Nineteenth above Chestnut street. Consists of alterations to windows. Contract awarded to Mitchell Bros., 2125 Race street, Philadelphia.

School (alts.), Reed, Eleventh and Moore streets, Philadelphia, \$4,320. Architect, J. Horace Cook, Nineteenth above Chestnut street, Philadelphia. Owners, Board of Education,

Nineteenth above Chestnut street. Consists of alterations to windows. Contract awarded to E. C. Durell, 1713 North Twenty-fourth street, Philadelphia.

Welding Shop (add.), 2024 North Tenth street, Philadelphia, \$2,000. Architects, Cornell & Matthews, Bulletin Building, Philadelphia. Owners, Pennsylvania Range Boiler Co., on premises. Brick, 1 story, 11x23 feet, slag roof, concrete floors, hollow metal sash and skylights, fire doors, roof ventilators. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia.

Office Building (alts.), Seventeenth and Arch streets, Philadelphia, \$19,918. Architect, private plans. Owners, Bell Telephone Co., on premises. Plastering, mill work, plumbing and painting to first and fifth floors, electric lighting. Contract awarded to F. L. Hoover & Son, 1029 Cherry street, Philadelphia.

Storage Building, Third and Westmoreland streets, \$30,000. Architect, private plans. Owners, Liggett & Myers Tobacco Co., Ontario and Third streets. Brick and concrete, 1 story, 90x180 feet, composition roof, concrete floor. Contract awarded to Austin Co., Cleveland, Ohio.

Jameson street, Reading, Pa. Owner, Harry Zahle, 307 Penn street, Reading, Pa. Brick, 4 stories, 32x270 feet, steam heating, electric lighting, tile work, metal bulks, hardwood floors (electric motors reserved). Owner is taking sub-bids.

Store and Apartment (alts. and add.), 348 Penn street, Reading, Pa. Architect, Wayne M. High, 11 North Fifth street, Reading, Pa. Brick, 3 stories, composition and tin roof, hot water heating, electric lighting, tile floor, hollow metal skylights, metal lath. Plans in progress.

Factory, Condale, Pa., \$26,000. Architect, Wayne M. High, Reading, Pa. Owners, Condale Hosiery Co., care of H. A. Muschlitz, Slatington, Pa. Steel, brick and reinforced concrete, 3 stories and basement, 99x50 feet, composition roof, concrete floors, electric lighting, rollow metal sash, fire doors, metal window guards, reinforced concrete fire towers, ornamental iron, sprinklers. Owners are taking sub-bids.

Residence and Garage, Wyomissing, Pa. Architect, L. D. Lance, Wyomissing, Pa. Owner, N. E. Richards, Wyomissing, Pa. Brick, 2 stories; 39x29 feet and 20x24 feet, slate roof, hardwood and cement floors, vapor vacuum heating, combination lighting, tile, marble work, metal lath. Owner is taking sub-bids.

Residence, Wyomissing, Pa. Architect, L. D. Lance, Wyomissing, Pa. Owner, G. F. Lance, Jr., Reading, Pa. Brick, 2 stories, 36x28 feet, slate roof, hardwood and pine floors, hot water heating, electric lighting, tile work. Architect taking bids. Daniel H. Hunter, Chas. Schlegel, N. A. Sharp, and Wm. Gaul, all of Reading, Pa., are figuring.

Garage and Bungalow, Schumakersville, Pa., \$5,000. Architect, Wayne M. High, 11 North Fifth street, Reading, Pa. Owner, D. S. Wolf, Schumakersville, Pa. Stone and shingle, 2 stories, 50x20 feet, shingle roof, steam heating, electric lighting. Architect is taking sub-bids.

Garage, Clifton Heights, Pa. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, Leonard B. Botfield, 776 S. Swanson street, Philadelphia. Brick, 1 story, 40x126½ feet, slag roof, cement floors, stone

PENNSYLVANIA

Construction News

Church and Sunday School, Bethlehem, Pa. Architect, A. A. Ritcher, 31 North Sixth st., Reading, Pa. Owners, Calvary Reformed Church, care of Rev. T. C. Stroek, Bethlehem,

Pa. Brick, 1 story. Plans about to be started. Too early for details.

Store and Apartments (alts.), 434 Penn st., Reading, \$12,000. Architect, C. J. Young, 249

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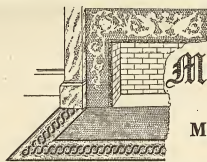
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foundations, steam heating, electric lighting, hollow metal skylights, ornamental iron. Architects have received bids.

Residence, Garden City, Delaware County, Pa. Architect, Elmer Sheffer, Chester, Delaware County, Pa. Owner, M. F. Meymentz, Garden City, Delaware County, Pa. Brick, 2½ stories, 32x34 feet, shingle or slate roof, yellow pine floors, hot water heating, electric lighting, tile work. Architect has received bids.

Factory, Easton, Pa., \$50,000. Architect, Wm. Michler, Drake Building, Easton, Pa. Owners, Chipman Knitting Mills, care of architect. Mill construction, asbestos sheathing, 2 stories, 60x143 feet, and 1 story, 110x45 feet, rubberoid roof, maple floors, steam heating, electric lighting, hollow metal sash. Architect taking sub-bids.

Store Building, West Fourth street, South Bethlehem, Pa., \$10,000. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, Edwin Young, South Bethlehem, Pa. Brick, 1 story, 40x80 feet, composition roof, hot air heating, electric lighting, hollow metal sash. Plans in progress. Bids will be taken in one month.

Store and Apartment (alts.), corner of N. and Broad streets, Bethlehem, Pa., \$8,000. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, George States, 730 East Third street, South Bethlehem, Pa. Brick, 1 story, 40x80 feet. Interior alterations and new front, 2½ stories, hot air heating, electric lighting. Plans in progress. Bids will be taken in one month.

Stores and Apartments (alts. and add.), South Bethlehem, Pa., \$9,000. Architect, Robert E. Ochs, City Realty Building, South Bethlehem, Pa. Owner's name withheld. Brick and iron work, 3 stories, 33x20 feet, slate and slag roof, electric lighting, kalamein doors, hollow tile, metal lath. Plans completed. Architect ready for bids.

Residence, South Bethlehem, Pa., \$7,000. Architect, A. W. Leh, P. O. Building, South Bethlehem, Pa. Owner, A. R. Dietrich, South Bethlehem, Pa. Brick, 2½ stories, slate roof, hardwood floors, hot water heating, electric lighting. Preliminary sketches in progress.

Silk Mill (alts.), Bowmanstown, Pa., \$5,000. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owners, Bowman's Silk Co., care of N. F. Hafford, Weisport, Pa.

Brick, 2 stories, steam heating, electric lighting, hardwood floors. Too early for details.

Moving Picture Theatre, South Bethlehem, Pa., \$35,000. Architect, A. W. Leh, P. O. Building, South Bethlehem, Pa. Owner, R. E. Neumeyer, South Bethlehem, Pa. Brick, 1 story, 60x100 feet, slag roof, heating undecided, electric lighting, hollow tile, metal lath. Owner is taking sub-bids.

Residence, Allentown, Pa., \$25,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owner's name withheld. Hollow tile and stucco, 2 stories and basement, 45x32 feet, wing 24x17 feet, tile roof, hardwood floors, vapor heating, electric lighting, tile and marble work. Architect will take sub-bids in one week.

Residence (int. alts.), northeast corner of Thirty-third and Page streets, Philadelphia, \$5,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owner, Max Weinroth, on premises. Brick, 3 stories, hardwood floors, electric lighting, marble and terrazzo work, heating. Architect is taking sub-bids.

Twin Houses (6), West Bethlehem, Pa. Architect, C. F. Spangenberg, South Bethlehem, Pa. Owners, Herman & Jones, Bethlehem, Pa. Frame, 2½ stories, 32x44 feet, slate roof, pine floors, hot air heating, electric lighting. Owner is ready for bids.

Store (alts.), Easton, Pa., \$15,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owner's name withheld. Brick, new front, 3 stories, one-story addition, 30x60 feet, slag roof, hardwood floors, tile and marble work, ornamental copper work, painting and plastering. Architect is taking general and sub-bids. P. J. Lerch, Easton, Pa., is figuring.

Garage, Latham Park, Pa. Architect, Conrad F. Neff, Sixteenth and Sansom streets, Philadelphia. Owner, John E. Cochrane, Latham Park, Pa. Frame and stucco, 1½ stories, 15x25 feet, slate roof, cement floor, electric lighting. Architect taking bids, due as soon as possible. E. R. Hall, 34 South Seventeenth street; Specht & Sperry, Heed Building, Philadelphia, and W. John Stevens, Inc., Wynecote, Pa., are figuring.

Church, Coatesville, Pa. Architect, R. A. Kerns, Jr., 242 Main street, Coatesville, Pa. Owners, St. Mary's Greek Catholic Magyar Congregation, care of architect. Brick, 2 stories, 32x70 feet, slag roof, stone foundations, steam heating, electric lighting. Architect

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taking bids, due June 18th. Horace Entriekin, W. K. Thorn, W. J. Elliott, J. W. Beard, and Joseph Ellessor, all of Coatesville, Pa., are figuring.

Battery House, Trenton Junction, Pa. Architect, private plans. Owners, Philadelphia and Reading Railroad Co., care of Chief Engineer, Twelfth and Market streets, Philadelphia. Brick, terra cotta trimming, 1 story, 35x18 feet, slag roof, granolithic floors, concrete foundations, roof ventilators. Owners taking bids, due June 24th. The following are figuring: Wm. R. Dougherty, 1610 Sansom street; Mitchell Bros., 2125 Race street; H. E. Baton, 1713 Sansom street; Wark-Yardley Co., 1737 Filbert street; Robert E. Lamb Co., 843 North Nineteenth street; A. L. Carhart, Penfield Building, Philadelphia, are figuring.

Ammunition Filling Houses (2), Spec. 3006, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, Department of Navy, Bureau of Yards and Docks, care of C. W. Parks, Chief, Washington, D. C. Steel and wood, asbestos protected metal, 1 and 2 stories, 160x30 feet and 145x30 feet, composition roof, wood and cement floors, concrete foundations, vacuum heating, electric lighting, rolled steel sash, roof ventilators. Lowest bidder: Wark-Yardley Co., 1737 Filbert street, Philadelphia, \$54,221.

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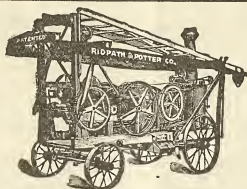
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PENNSYLVANIA Contracts Awarded

Temporary Housing Project (17 Buildings), Bethlehem, Pa., \$750,000. Architects, Mann & MacNeill, for War Department, Washington, D. C. Owners, Housing Branch, Control Bureau, Construction Division, War Department, Washington, D. C. Frame, 2 stories, various sizes, composition roof, wood floors, stove heating, electric lighting. Contract awarded to Warren-Moore Co., Colonial Trust Building, Philadelphia.

Housing Project, Chester, Pa., \$2,000,000. Architects, G. Edwin Brumbaugh and Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Chester Ship Building Co., Chester, Pa. Brick, houses and hotels. Contract awarded to McArthur Bros. Co., 120 Broadway, New York City.

Residence (alts. and add.), Lancaster Road and Sycamore avenue, Merion, Pa. Architects, Seeburger & Rabenold, Pennsylvania Building, Philadelphia. Owner, Kiwa Schwartz, on premises. Brick and plaster, 2½ stories, new second story portico, brick and plaster, shingle roof. Contract awarded to F. A. Havens Co., 845 North Nineteenth street.

Garage and Chauffeur's Quarters, near West Chester, Pa. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner's name withheld. Stone, 2 stories, 50 feet front and 2 wings, slate roof, cement and wood floors, hot water heating, electric lighting. Contract awarded to Williams Jones, West Chester, Pa.

Barn and Wagon House, near West Chester, Pa. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner's name withheld. Stone, 2 stories, 35x8 feet, slate roof, cement floors. Contract awarded to William Jones, West Chester, Pa.

Residence, Wyomissing, Pa., \$6,000. Architect, L. D. Lance, Wyomissing, Pa. Owner, L. D. Douglas, Wyomissing, Pa. Brick and frame, 2 stories, 30x30 feet, shingle roof, pine floors, electric lighting, tile work, metal lath. Contract awarded to W. A. Sharp, Reading, Pa.

Machine Shop and Office, Rutherford, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete and brick, 1 story, 175x50

feet and 40x20 feet, asbestos roof, cement, pine and mastic floors, electric lighting, rolled steel sash and skylights, fire doors, ornamental iron work, roof ventilators, asbestos roof from machine shop to engine house, 65x20 feet. Contract awarded to A. Warfel, Lancaster, Pa.

Factory (add.), Allentown, Pa., (South Twelfth street), \$10,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owners, Roncy & Berger Co., on premises. Mill construction; 3 stories and basement, 30x40 feet, slag roof, maple floors, steam heating, electric lighting. Contract awarded to Ritter & Smith, Allentown, Pa.

Store Building, 714 Hamilton street, Allentown, Pa., \$6,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owners, Star Credit Clothing Co., on premises. New front, electric lighting, tile, marble and terrazzo work, metal bulks, metal lath, plate glass. Contract awarded to Butz & Clader, Allentown, Pa.

Apartment Houses (2), (alts.), 111 South Sixth street, Reading, Pa., and 208 Penn st., Reading, Pa. Architect, C. J. Young, Reading, Pa. Owner, Mrs. Lillie Specht, Reading, Pa. Brick, 2½ and 3 stories, interior alterations, vapor heating, electric lighting, yellow pine floors, carpentry and plastering. Contract awarded to Geo. Kline, Reading, Pa.

Emergency Hospital (6 Buildings), Cape May, N. J. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, care of C. W. Parks, Chief, Washington, D. C. Wood on concrete piles, 1 story, 126x23 feet, 55x61 feet, 156x23 feet, 112x27 feet, 150x31 feet and 100x27 feet, ready roof, North Carolina pine floors, steam heating, electric lighting, painting, glazing and plumbing, roof ventilators. Owners taking bids, due June 24. Cramp & Co., Denckla Building, Philadelphia, are figuring.

Ship Fabrication Plants, Pottstown, Pa., and Leedsdale, Pa., \$2,000,000. Architect, private plans. Owners, McClintock Marshall Co., Pittsburgh, Pa. Steel and brick, 1 story, 400x600 feet each, concrete foundations, steam heating, electric lighting, rolled steel sash, wood and composition roofs, oak and concrete floors. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building, Philadelphia.

Garage, Rosemont, Pa. Architects, Duhring, Okie & Ziegler, Bailey Building, Philadelphia. Owner, Mrs. Samuel Vauclair, Rosemont, Pa. Brick and frame, 1 story, 24x39 feet, shingle roof, cement floor, hot water heating, electric lighting (gasoline storage system reserved), roadway work. Contract awarded to Wolfe & Co., Bryn Mawr, Pa.

Plant (alts.), Plymouth, Pa. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Brick and concrete, pump house and new tankage, cement floors. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

Service Building, Mulberry and Adams sts., Scranton, Pa. Architect, W. C. Wilkins Co., Westinghouse Building, Pittsburgh, Pa. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Brick, stone and terra cotta, 1 story, 30x15 feet, wall 116x75 feet, steel roof, cement and tile floors, steam heating, electric lighting, tile and marble work, hollow metal skylights, metal lath, safety treads, metal window guards, waterproofing. Contract awarded to Metzger & Fisher, Otis Building, Philadelphia.

NEW JERSEY Construction News

Signal Tower and Battery House, Manville Junction, N. J., \$20,000. Architect, Samuel T. Wagner, Twelfth and Market streets, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Brick, steel and stone, 2 stories, 15x26 feet and 18x34 feet, slag roof, asbestos shingle roof, concrete floors, hot water heating, electric lighting, fire and hollow metal doors, iron stairs, ornamental iron work, roof ventilators. Contract awarded to A. L. Carhart, Penfield Building, Philadelphia.

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Store (alts. and imp.), Bridgeton, N. J. Architects, Stearns, Woodnutt & Schmohl, Stichen Girard Building, Philadelphia. Owner, Osear Whipple, on premises. Interior alterations, mill work, new marble front, glazing, steam heating, electric lighting and fixtures. Plans completed. Architects are taking sub-bids.

School (add.), Deerfield Township, Cumberland County, N. J. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owners, School Board of Deerfield Township, care of architects. Frame, 1 story, 40x26 feet, shingle roof, pine floors. Plans completed. Architects will take bids in a few days.

Church, Millville, N. J., \$20,000. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owners, West Side M. E. Church, Millville, N. J. Hollow tile and stucco, 1 story and basement, slate or asbestos shingle roof, steam heating, electric lighting, pine floors, hollow tile. Plans completed. Architects ready for bids.

Residences (3), Atlantic City, N. J. Also (3) **Garages.** Architects, Druckenmiller & Williams, 1527 Chestnut street, Philadelphia. Owner's name withheld. Brick and stucco, 3 stories, 30x65 feet, slate roof and tile floors, hardwood floors, vapor heating, electric lighting, tile and marble work. Architects taking bids, due June 22nd. A. B. Bowen, J. Mathis & Son, Wesley B. Poreh, Hampton Bros., Harry G. Seull, and Wilbur Beaumont, all of Atlantic City, N. J., are figuring.

Hospital (add.), Trenton, N. J., \$90,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State of New Jersey, Board of Directors, State Hospital for Insane, Trenton, N. J. Brick or stone, 3 stories and basement, 40x170 feet, slag roof, fireproof floors, vacuum heating, electric lighting. Architect taking bids, due June 28th.

School (alts. and add.), Trenton, N. J., \$17,500. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, wing 24x24 feet, steam heating. Architect taking bids, due June 27th at noon.

Shop, north side of Pearl street, between Delaware avenue and Point street, Camden, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Warren-Webster Co., Camden, N. J. Timber and frame, 2 stories, slag roof, Architects taking bids, due June 26th at noon. F. B. Davis, 240 North Sixteenth street; Philip Haibach Cont. No. Twenty-sixth and Thompson street; Ketcham & McQuade, 1029 Brown street; H. E. Baton, 1713 Sansom street; Sutton & Stephenson, 1317 Washington avenue, and Barclay White & Co., 1713 Sansom street, all of Philadelphia, Pa., are figuring.

Magazine Buildings (10), Spec. 2927, Lake Denmark, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Washington, D. C., care of Bureau of Yards and Docks, Navy Department. Stucco, brick and steel, 1 story, 198x50 feet, asbestos shingle roof, asphalt, mastic and composition floors, electric lighting, rolled steel sash, fire doors, hollow tile, roof ventilators, waterproofing. Lowest bidder: George Colon & Co., 81

East Twenty-fifth street, New York City, \$245,000.

Church, Roebing, N. J., \$15,000. Architect, Robert Schumann, 932 Lambertson street, Trenton, N. J. Owners, Rumanian Greek Orthodox Congregation, care of architect. Brick, 1 story, 32x65 feet, slate roof, hardwood floors, steam heating, electric lighting. Architect taking bids, due June 23rd. Chas. Barlow, Trenton, N. J., and Abram Mitchell, Bordentown, N. J., are figuring.

Reconstruction of Water System, Skillman, N. J., \$14,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Village for Epileptics, Dr. Weeks, Superintendent, care of architect. Frame, 1 story, 28x20 feet, shingle roof. Architect taking bids, due June 27th. J. R. White and W. J. Warren, both of Princeton, N. J., are figuring.

Isolation Hospital, Jamesburg, N. J., \$2,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Home for Boys, care of architect. Frame, 1 story, 30x18 feet, shingle roof, steam heating, electric lighting. Architect taking bids, due June 27th. Mathews Const. Co., Princeton, N. J.; the Carleton Co., Inc., Longacre Building, New York City; F. L. Buckelew, Jamesburg, N. J.; Altieri Const. Co., 101 Park avenue, New York City, and Metzger & Fisher, Otis Building, Philadelphia, are figuring.

Store Room, Vineland, N. J., \$17,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Home for Peeble Minded Women, Vineland, N. J. Brick, 1 story, 50x64 feet, slag roof, yellow pine floors, electric lighting. Architect taking bids, due June 24th. Metzger & Fisher, Otis Building, Philadelphia, and J. S. Rogers Co., Moorestown, N. J., additional bidders.

Bungalows (2), Morris Plains, N. J., \$8,000. Architect, F. H. Bent, State Capitol, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile, 2 stories, 53x36 feet, asbestos shingle roof, steam heating, electric lighting, tile work. Plans completed. Architect taking bids, due June 28th.

Assembly Hall, Jamesburg, N. J., \$40,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Board of Managers, State Home for Boys, Jamesburg, N. J. Brick and steel trusses, 1 story, 68x123 feet, slate roof, steam heating, electric lighting, metal lath. Owners taking bids, due June 27th. Mathews Const. Co., Princeton, N. J.; F. L. Buckelew, Jamesburg, N. J.; Metzger & Fisher, Otis Building, Philadelphia; Altieri Const. Co., 101 Park avenue, New York City, and the Carleton Co., Inc., Longacre Building, New York City, are figuring.

DELAWARE

Construction News

Residence (alts. and add.), Ninth and Franklin streets, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner's name withheld. Consists of interior alterations, 3 stories, hardwood floors, steam heating, electric lighting. Plans in progress. Architect will take bids in one week.

Warehouse (add.), Newark, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owners, American Vulcanized Fibre Co., Newark, Del. Brick, 1 story, 100x100 feet, asbestos shingle roof, maple floors (steam heating and sprinklers reserved), electric lighting, fire doors. Architect is taking sub-bids.

Store and Apartment (alts.), Eleventh and Lombard streets, Wilmington, Del. Architect, Wallace E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Max Siegel, Wilmington, Del. Brick, 3 stories, general interior alterations. Architect taking bids. Wm. Anderson, Wilmington, Del., is figuring.

Apartment Building (24 families), Twentieth and Market streets, Wilmington, Del. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. David Bossman, Twenty-third and Market sts., Wilmington, Del. Brick and terra cotta, 4 stories, slag roofs, pine and hardwood floors, electric lighting and gas lighting. Plans about completed. Architect taking sub-bids.

Office Building, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner's name withheld. Brick and concrete, 1 and 2 stories, 100x250 feet, slag roof, steam heating, electric lighting. Plans completed. Architect will take bids in one week.

Residence (alts. and add.), Claymont, Del. Architect, R. C. Tindall, 914 Orange street, Wilmington, Del. Owner, Thos. Rossiter, Wilmington, Del. Brick, 2½ stories, 40x80 feet, tile roof, hardwood floors, electric lighting, tile work. Architect taking bids. W. D. Haddock & Co., Chas. J. Dougherty, and Chas. Brice, all of Wilmington, Del., are figuring.

Residence, Pennsylvania avenue and River-view, Wilmington, Del. Architects, Brown & Whiteside, Dupon Building, Wilmington, Del. Owner, William Francis, 2102 Madison avenue, Wilmington, Del. Stone, 3 stories, 103x50 feet, slate roof, hardwood floors, hollow tile, steam heating, tile work (electric work and fixtures and composition floors reserved). Owner will build and will take sub-bids.

Residence (alts.), Wilmington, Del. Architect, R. C. Tindall, Wilmington, Del. Owner, Ralph Derr, care of architect. Brick and frame, 3 stories, 30x70 feet, stucco work, hardwood floors (plumbing and heating reserved), electric lighting, tile work. Architect taking bids. W. D. Haddock & Co., Charles Brice, and Chas. J. Dougherty, all of Wilmington, Del., are figuring.

Lumber Shed and Machine Shop (alts.), Wilmington, Del. Engineer, Albert C. Wood, Stock Exchange Building, Philadelphia. Owners, Jessup & Moore Paper Co., Commercial

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Trust Building, Philadelphia. Stone and frame, 1 story, 36½x18 feet, slag roof, plank floors, roof ventilators. Owners taking bids. Pomeroy Const. Co., 1609 Ranstead street, is figuring.

Store and Office (alts.), 716 Market street, Wilmington, Del. Architect, John D. Thompson, Ford Building, Wilmington, Del. Owners, Hurley Powell Co., on premises. Brick, 3 stories, 100x20 feet, steel beams (tile and marble work reserved), maple floors, carpentry, plastering, electric lighting, fireproof partitions. Contract awarded to John E. Healy & Son, 707 Tatnall street, Wilmington, Del.

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Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Storage Building, Third and Westmoreland streets, Philadelphia, \$30,000. Liggett & Myers Tobacco Co. (O), on premises. Austin Company (C), Bulletin Building, Philadelphia. Brick, 1 story, 90x150 feet.

Dwelling, Park avenue, north of Sixty-fifth avenue, Oak Lane, Philadelphia, \$4,200. Michael Britz (O), 509 W. Cumberland street, Philadelphia. H. H. Wehmeyer (C), 509 W. Cumberland street, Philadelphia. Brick, stone foundations, 3 stories, steam heating, single composition roof, 15x38 feet.

Dwelling, southeast corner of Twenty-second and Curtin streets, Philadelphia, \$2,600. James Bowman (O), on premises. H. D. Prettyman (C), 2600 South Broad street, Philadelphia. Brick, 2 stories, 16x47 feet, slag roof, hot air heating.

Garage, 2348-50-52 South Second street, Philadelphia, \$4,500. E. Shneck (O), 2406 W. Somerset street, Philadelphia. Jacob Gaebner (C), 2214 North Third street, Philadelphia. Brick, 1 story, 43x50 feet, stone foundations, slag roof.

Building, 3070-72 Frankford avenue, Phila-

delphia, \$12,000. Frankford Avenue Garage Co. (O), on premises. Harry Drake (C), 3239 Frankford avenue, Philadelphia. Brick, 1 story, 80x120 feet.

Residence, 6435 Woodbine avenue, Overbrook, Philadelphia, \$15,500. John S. Gustine (O), 6337 Woodbine avenue, Overbrook, Philadelphia. Milton W. Young (C), Overbrook, Philadelphia. Stone, 3 stories, 44x29 feet, shingle roof, steam heating.

Dwellings (27), Ashdale and Lindley avenues, Philadelphia, \$95,700. Clyde A. Schuler (O and C), 1342 Wagner avenue, Philadelphia. Brick, 2 stories, 38x27 feet, slag roof, hot water heating.

Dwellings (6), 1101-3-5-7-9-11 Robbins st., Philadelphia, \$8,400. Harry F. Harting (O and C), 7403 Bingham street, Philadelphia. Brick, 2 stories, 14x41 feet, hot water heating, slag roof.

Garage, Marshall and Lyeomings streets, Philadelphia, \$400. Robert Braun (O), 4062 North Marshall street, Philadelphia. John H. Cloak, Jr. (C), 5421 North Fifth street, Philadelphia. Stone foundations, 1 story, 9x15 feet.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Work Shop and Office Building, southeast corner of Fourth and Lehigh avenue, Philadelphia, \$1,000. Kramer Woodworking Co. (O), Third and Cumberland streets, Philadelphia. Furness, Evans & Co. (C), Franklin Bank Building, Philadelphia. Alterations.

Warehouse, 206-09 South Twenty-first st., Philadelphia, \$500. Mallalieu & Conrey (O), 1816 Market street, Philadelphia. Thos. M. Seeds, Jr., Co. (C), 1207 Race street, Philadelphia. Alterations.

Power Plant, Arch and Mascher streets, Philadelphia, \$7,500. Philadelphia Electric Co. (O), Tenth and Chestnut streets, Philadelphia. Charles Gilpin (O), Harrison Building, Phila-

delphia. Brick, 1 story, stone foundations, 20x45 feet.

Manufacturing Building, Richmond street, west of Frankford avenue, Philadelphia, \$15,000. G. & H. Barnett Co. (O), on premises. M. Ward Esby, Inc. (C), 1420 Chestnut st., Philadelphia. Brick, 1 story, 15x200 feet. Alterations.

Laboratory, 1827 Naudain street, Philadelphia, \$2,500. Research Laboratories (O), on premises. B. Bornstein (C), 1510 N. Franklin street, Philadelphia. Brick, one-story addition, 20x24 feet, cement floors, stone foundations.

Runway, Richmond street, north of Norris

street, Philadelphia, \$50,000. Wm. Cramp Ship and Engine Building Co. (O), Beach and Ball streets, Philadelphia. Belmont Iron Works (C), Twenty-second and Washington avenue, Philadelphia. Steel shipway, concrete foundations, 500 feet long.

Forge Shop, 2300 East Tioga street, Philadelphia, \$12,000. F. A. Ashman & Sons Co. (O), 2300 East Tioga street, Philadelphia. Robert B. Lederle (C), Witherspoon Building, Philadelphia. Iron, 48x120 feet, slag roof.

Garage, 3208 Woodland avenue, Philadelphia, \$2,200. George Wood (O), on premises. H. P. Paxson (C), 6006 Market street, Philadelphia. Brick, 1 story, 16x32 feet.

Stock Room, 1230 Market street, Philadelphia, \$2,000. M. Friedenborg (O), Real Estate Trust Building, Philadelphia. Thayer & Co. (C), 1723 Ludlow street, Philadelphia. Brick, two-story addition, 18x64 feet, slag roof.

Church, Eighteenth and Tioga streets, Philadelphia, \$3,500. Tioga M. E. Church (O), Eighteenth and Tioga streets, Philadelphia. F. E. Wallace (C), 1220 Chancellor street, Philadelphia. Alterations, arca-way, 85 feet long.

Dwelling, 638 South Sixtieth street, Philadelphia, \$400. John Thomas (O), 638 South Sixtieth street, Philadelphia. I. Mercerau (C), 637 South Sixty-eighth street, Philadelphia. New porch.

Store and Office, Fifty-second and Chestnut streets, Philadelphia, \$1,375. Henry Felt (O), 703 South Sixtieth street, Philadelphia. Geo. M. Crowl (C), 5500 Wyalusing avenue, Philadelphia. Brick, one-story addition, 10x19 feet, stone foundations, slag roof.

Store Building, southwest corner of Eleventh and Courtland streets, Philadelphia, \$300. M. Saritz (O), Ninth and Tasker streets, Philadelphia. Raskovsky (C), 527 Dickinson street, Philadelphia. Cornice work, alterations.

Private Residence, Queen Lane, west of Wissahickon avenue, Philadelphia, \$2,000. Mrs. Wm. L. McLean (O), Queen Lane, west of Wissahickon avenue, Philadelphia. John W. Kohl (C), 100 North Fifteenth street, Philadelphia. Brick, one-story side addition, minor interior alterations.

Apartments, 1519 North Seventh street, Philadelphia, \$1,250. E. D. Smyth (O), 1627 North Fifteenth street, Philadelphia. Eugene Y. Funk (C), 1502 North Twenty-first street, Philadelphia. Brick, two-story addition, 9x14 feet, partitions.

Store and Dwelling, 460 North Eighth street, Philadelphia, \$650. Louis Pein (O), 525 N. Marshall street, Philadelphia. Max Miron (C), 835 North Fifth street, Philadelphia. New flush bulks.

Garage, American and Clarkson streets, Philadelphia, \$775. John Clabby (O and C), 4359 North Ninth street, Philadelphia. New steam heating system.

Dwelling, 1715 North Thirty-first street, Philadelphia, \$400. C. D. Chackman (O and C), 1715 North Thirty-first street, Philadelphia. Brick, 1 story, 12x7 feet, tin roof.

Synagogue, 324-26 Fitzwater street, Philadelphia, \$8,000. Burnstein (O and C), 235 Queen street, Philadelphia. Brick three-story rear addition, 22x40 feet, concrete foundations. Shed, Fifteenth and Hort streets, Philadelphia, \$600. Charles A. Shetzline (O and C), 2021 South Broad street, Philadelphia. Repair fire damages.

Store and Dwelling Seventh and Moore sts., Philadelphia, \$1,600. Morris Magill (O), 2251 North Twenty-ninth street, Philadelphia. Chas. Gum (C), 2546 North Twenty-ninth street, Philadelphia. Brick, two-story addition, 6x24 feet.

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delphia. H. C. Dahl (C), 231 South Eighth street, Philadelphia. Brick, two-story addition, 18x64 feet, slag roof.

Garage, 1740 North Crowskey street, Philadelphia, \$1,400. John Searles (O), Fifteenth and Somerset streets, Philadelphia. Albert Schmill (C), 2449 North Hancock street, Philadelphia. Steam heating system.

Building, 1407-09 North Eighth street, Philadelphia, \$2,000. Pennsylvania Surgical Manufacturing Co. (O), 1407 North Eighth street, Philadelphia. George Gernudy (C), 1644 N. Perth street, Philadelphia. Brick, cement floors, etc.

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Offices, 706-08 Sansom street, Philadelphia, \$1,600. Lea Estates (O), 700 Chestnut street, Philadelphia. H. M. Kister (C), 621 Sansom street, Philadelphia. Brick, 1 story, 6x8 feet, cement floors.

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Dwelling, 5540 Haverford avenue, Philadelphia, \$550. Emily Oldfield (O), 5540 Haverford avenue, Philadelphia. George P. Richlend (C), 131 Willow street. Brick, second story addition, 13x12 feet, stone foundations.

Machine Shop, Fifty-third and Lansdowne avenue, Philadelphia, \$1,200. Mark Jones (O and C), Sixty-third above Haverford avenue, Philadelphia. Brick, alterations.

Rooming House, southwest corner of Seventeenth and Arch streets, Philadelphia, \$900. War Work Council of Young Women's Christian Association (O), Weightman Building, Philadelphia. R. C. Ballinger & Co. (C), 218 North Thirteenth street, Philadelphia. Brick, interior alterations.

Dwelling, 420-24 North Franklin street, Philadelphia, \$11,000. Brown & Bailey Co. (O), Franklin and Willow streets. R. C. Ballinger & Co. (C), 218 North Thirteenth street, Philadelphia. Brick, 1 and 2 stories addition, 37x35 feet and 50x23 feet.

Stable, 111-13 Florist street, Philadelphia, \$500. Thos. G. Little (O), 26 West Coulter street, Philadelphia. D. L. Stites (C), 126 Herman street, Philadelphia. Alterations.

Dwelling, Cufeldt & Springfield avenue, Philadelphia, \$1,000. Dr. George Woodward (O), North American Building, Philadelphia. John E. Walt (C), 204 East Willow Grove avenue, Philadelphia. Brick, 13x5 feet.

Mill Building, Twenty-first and Clearfield streets, Philadelphia, \$15,000. Thos. J. Bron & Sons (O), Second and Westmoreland sts. Conneen Const. Co. (C), 1737 Filbert street, Philadelphia. General interior alterations.

FRANK MILES DAY, F. A. I. A.

(Continued from Page 368.)

Frank Miles Day & Brother, and in 1911 by Mr. Charles Z. Klauder, the firm name changing to Day Brothers & Klauder. Since the retirement of Mr. H. Kent Day, the firm has undergone a necessary modification, being known now simply as Day & Klauder.

The Young Men's Christian Association Building at Wilmington, the Free Museum of Science and Art at the University of Pennsylvania and a number of the finest country houses in Pennsylvania are among the work of this firm, the Museum of Science and Art being the joint product of Messrs. Day, Klauder, Wilson Eyre, Cope and Stewardson.

Mr. Day always took the keenest and most sympathetic interest in movements for the advancement of the arts, giving liberally of his time and means to the support of organizations pledged to the promotion of the higher canons of taste. He was a Fellow of the American Institute of Architects, which representative body he served as a director, as vice-president and in 1906 and 1907 as president. He was a trustee of the American Academy in Rome; an associate of the National Academy of Design; an honorary corresponding member of the Royal Institute of British Architects, an corresponding member of the Imperial Society of Russian Architects. Mr. Day was also a member of the American Philosophical Society, the Academy of Natural Sciences, the National Institute of Arts and Letters, the University Club of Philadelphia, and the Century Association, of New York.

He was Chairman of the Standing Committee on Competitions of the American Institute of Architects for several years; has acted as professional adviser in a number of important competitions held throughout the United States; has been employed upon juries of award in competition matters, and was in steady and consistent demand as a consulting architect.

Mr. Day served on the jury of award for the United States Post Office at San Francisco; the Public Library at St. Louis; the New York Post Office, and was a member of the jury for the new Court House in New York City, a ten million dollar edifice.

He was also consulting architect to the New Haven, Conn., Hospital, and a member of the Advisory Board in charge of the rebuilding of the John Hopkins University.

Among the many notable residences designed by Mr. Day, whose work in

country house designing won him an enviable place among the leaders in this difficult field, may be mentioned those of C. W. Bergner, at Ambler, Pa.; Theodore Voorhees, at Melrose, Pa., and Clement Newbold, S. P. Wetherill and Charlton Yarnall, in Philadelphia.

Mr. Day was justly rated one of the dominant forces in American architecture. His work is never without distinction, and shows in every line the master technician as well as the man of taste, reading and imagination. Mr. Day was for many years a lecturer on architecture at the University of Pennsylvania and at Harvard University. For many years he was professor of perspective at the Pennsylvania Academy of the Fine Arts. He was supervising architect at Yale University and Johns Hopkins University and with his firm was supervising executive architect at Delaware College, New York University, Pennsylvania State College and the University of Colorado.

His father was Charles Day, who came here from England in 1842. His mother was Anna R. Day, a direct descendant, through her mother, of Rebecca Keen, mother of Joran Kyn (Keen), one of the Swedish settlers at Tinicum Island, in the Delaware River in 1643. On her father's side Mr. Day's mother was a direct descendant of Griffith Miles, one of the original Welsh settlers, who landed here in 1682 before the arrival of William Penn.

Mr. Day is survived by his wife, Anna Blakiston, and two children, Frances and Kenneth.

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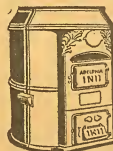
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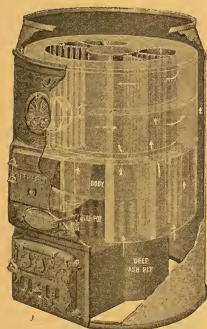
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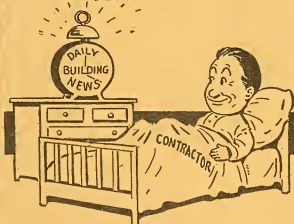


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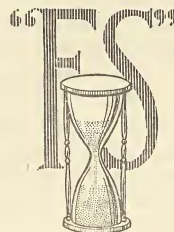
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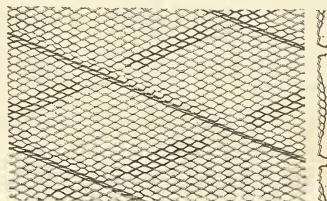
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VOLUME XXXIII

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As The Editor Sees It



IN view of the uncertainty of the building industry during the period of the war, the interpretation put upon the situation by N. F. Hoggson in very encouraging.

"The government has at last made clear that it does not desire and has never desired to put a stop to necessary building construction," said N. F. Hoggson, President of Hoggson Brothers, the New York and Chicago builders. "The individual or corporation confronted with a building problem need only answer one question: Is the building essential?"

"Secretary McAdoo has stated in unequivocal terms in a letter to Senator Calder, which forms a part of the Senate records, that 'there has never been any suggestion that buildings actually needed for the health and protection of the civil population, or for the conduct of essential business of the country, should not be constructed during the period of the war.' A great number of contemplated necessary building operations have been postponed because of an erroneous interpretation of the government's wishes. These should now go ahead.

Mr. McAdoo's statement was in answer to Senator Calder, who had asserted that building operations would not exceed \$300,000,000 for 1918, as compared with \$1,500,000,000 for 1916, a below normal year, and one of the principal causes for this great decrease was due to the supposed attitude of the government in placing a ban on building construction. Not only were private owners holding up

work, but, according to Senator Calder, banks and mortgage companies were not lending money on building operations, and very little on real estate mortgages.

"There has been every reason for the average person to believe that the attitude of the government was against building now. 'Economy-at-all-costs' advocates have spread the 'no building' idea to the point where to build during the war would amount almost to disloyalty.

"A committee of the Indiana Limestone Quarrymen's Association recently waited on Mr. McAdoo and made clear to him that his stand on the building proposition had been misunderstood. It was suggested that a new, clean-cut statement from him to the effect that the government meant to pursue a constructive policy would serve to dispel the fog of misapprehension. The secretary replied to the suggestion that in view of previous statements to the public on the subject, and the apparent misunderstanding which has arisen through them, further utterance would only serve to thicken the fog.

"Mr. McAdoo's letter to Senator Calder now makes it clear that the government does not regard all private building as non-essential. So at last we are down to a common-sense basis. Any one confronted with a building problem will have no trouble in determining whether or not to carry out the operation at this time."

* * *

Americans, having realized the value of preparedness, must now face problems which will not fully confront us until the

expiration of the present conflict. One of the most serious of these problems is the fitting of the American soldier to take up his life as a respected citizen of his community. This work is now being inaugurated by the American Red Cross Institute for Crippled and Disabled Men, and we are printing extracts from an article on "The Duty of the Employer in the Reconstruction of the Crippled Soldier," by Douglas C. McMurtrie, Director of the Red Cross Institute.

"We must count on the return from the front of thousands of crippled soldiers. We must plan to give them on their return the best possible chance for the future.

Dependence cannot be placed on monetary compensation in the form of a pension, for in the past the pension system has proved a distinct failure in so far as constructive ends are involved. The pension has never been enough to support in decency the average disabled soldier, but it has been just large enough to act as an incentive to idleness and semi-dependence on relatives or friends.

The only compensation of real value for physical disability is rehabilitation for self-support. Make a man again capable of earning his own living and the chief burden of his handicap drops away. Occupation is, further, the only means for making him happy and contented.

Soon after the outbreak of hostilities the European countries began the establishment of vocational training schools for the rehabilitation of disabled soldiers.

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They had both the humanitarian aim of restoring crippled men to the greatest possible degree and the economic aim of sparing the community the burden of unproductivity on the part of thousands of its best citizens. The movement had its inception with Mayor Edouard Herriot, of the city of Lyons, France, who found it difficult to reconcile the desperate need for labor in the factories and munition works while men who had lost an arm or a leg but were otherwise strong and well were idling their time in the public squares. He therefore induced the municipal council to open an industrial school for war cripples which has proved the example and inspiration for hundreds of similar schools since founded throughout France, Italy, Germany, Great Britain and Canada.

The disability of some crippled soldiers is no bar to returning to their former trade, but the injuries of many disqualify them from pursuing again their past occupation. The schools of training prepare these men for some work in which their physical handicap will not materially interfere with their production.

The education of the adult is made up largely of his working experience. The groundwork of training in his past occupation must under no circumstances be abandoned. The new trade must be related to the former one or be, perhaps, an extension or specialization of it. For example, a man who had done manual work in the building trades may by instruction in architectural drafting and the interpretation of plans be fitted for a foreman's job, in which the lack of an arm would not prove of serious handicap. A trainman who had lost a leg might wisely be prepared as a telegrapher, so that he could go back to railroad work, with the practice of which he is already familiar.

In the readjustment of the crippled soldier to civilian life, his placement in employment is a matter of the greatest moment. In this field the employer has a very definite responsibility.

But the employer's duty is not entirely obvious. It is, on the contrary, almost diametrically opposite to what one might superficially infer it to be. The duty is not to "take care of" from patriotic motives; a given number of disabled men, finding for them any odd jobs which are available, and putting the ex-soldiers in them without much regard to whether they can earn the wages paid or not.

Such a procedure cannot have other than pernicious results. In the first years of war the spirit of patriotism runs high, but experience has shown that men placed on this basis alone find themselves out of a job after the war has been over several years, or in fact, after it has been in progress for a considerable period of time.

A second weakness in this method is that a man who is patronized by giving him a charity job, comes to expect as a right such semi-gratuitous support. Such a situation breaks down rather than builds up character, and makes the man progressively a weaker rather than a stronger member of the community. We must not do our returned men such injury.

The third difficulty is that such a system does not take into account the man's future. Casual placement means employment either in a makeshift job as watchman or elevator operator such as we should certainly not offer our disabled men except as a last resort—or in a job beyond the man, one in which, on the cold-blooded considerations of product and wages, he cannot hold his own. Jobs of the first type have for the worker a future of monotony and discouragement. Jobs of the second type are frequently disastrous, for in them a man, instead of becoming steadily more competent and building up confidence in himself, stands still as regards improvement and loses confidence every day. When he is

dropped or goes to some other employment, the job will have had for him no permanent benefit.

With thoughtful placement effort, many men can be employed directly on the basis of their past experience. With the disabled soldiers who profit by the training facilities the government will provide, the task should be even easier.

This, then, constitutes the charge of patriotic duty upon the employer:

To study the jobs under his jurisdiction to determine what ones might be satisfactorily held by cripples. To give the cripples preference for these jobs. To consider thoughtfully the applications of disabled men for employment, bearing in mind the importance of utilizing to as great an extent as possible labor which would otherwise be unproductive. To do the returned soldier the honor of offering him real employment, rather than proffering him the ignominy of a charity job.

If the employer will do this, it will be a great factor in making the complete elimination of the dependent cripple a real and inspiring possibility.

NATIONAL ORGANIZATION OF BUILDING INDUSTRY

At Informal Meeting of Allied Interests Committee is Appointed to Effect Permanent Organization

IN an effort to find some plane upon which the construction and building industries of the entire country may lend co-ordinate assistance to the Government during the period of the war, forty representatives of organizations within the industries held an informal meeting, preceded by a luncheon, June 14th, in the Engineers' Club, 32 West 40th Street, New York.

The gathering was the result of a spontaneous understanding between the business men who have the building industry at heart to assist in an organized way the Government at Washington, in solving the problems which have arisen since the nation's entry into war.

The meeting was opened by H. H. Murdock, chairman of the Building Industries of New York, who then introduced Allen Walker, of the Chamber of Commerce of the United States, who acted as chairman of the meeting. The latter announced at the outset that the meeting was to be entirely informal and that those present came as individuals and not as accredited representatives of the organizations of the building industry to which they are attached.

The keynote of the meeting was to the

effect that "the industry must be adjusted to the Government and not the Government to the industry." The sentiment was voiced that in the past various organizations represented in the building industries had been obliged to act singly in matters affecting their particular interests, and that now the time had arrived when united effort should be made in order that the best results might be accomplished.

At the outset of the meeting a letter was read from Harry A. Wheeler, president of the Chamber of Commerce of the United States, in which he expressed himself as being in hearty accord with the aims and purposes outlined by the Building Industries of New York in its efforts to co-ordinate the various organizations in the building industry.

Chairman Walker, after his opening address, stated that the aim of the meeting was to outline a plan of organization, which will give the fullest representation to all branches of the industry, including the material, engineering, architectural, and contracting branches. This plan, he said, is aimed to insure the widest constituency and most equitable adjustment

(Continued on page 388)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residence and Garage, southwest corner of Seventeenth and Delancey Place, Philadelphia. Architect, Carl P. Berger, South Penn. Square Building, Philadelphia. Owner's name withheld. Consists of general remodeling, brick and marble exterior, 3 stories, 10x33 feet, tile work, hot water heating, electric wiring, plumbing, painting, plastering. Architect taking bids, due June 28th. A. L. Freitz & Son, Heed Building; E. J. Kreitzburg, 1345 Arch street; P. T. Mercer Co., 1706 Delancey street, and Charles C. Pace, Merion, Pa., are figuring.

Residences (8), Edgemont, between Sergeant and Cumberland streets, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Drehmann Paving Co., Twenty-sixth and Parrish streets, Philadelphia. Brick, 2 stories, 14x32 feet, slag and rubberoid roof, yellow pine floors, hot air heating, gas lighting, stone foundations, coal ranges. Owners taking sub-bids.

Residence, Sixty-eighth avenue and Thirtieth street, Oak Lane, Philadelphia. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owner's name withheld. Consists of interior alterations, hardwood floors, new partitions, tile work. Architects taking bids. Lam Building Co., 1001 Wood street, is figuring.

Building (alts. and add.), 1215 Race street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, S. Marks, care of architect. Architect taking bids. Lam Building Co., 1001 Wood street, is figuring.

Store and Office Building (alts.), southeast corner of Broad and Spruce streets. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Kahn & Greenburg, Morris Building, Philadelphia. Consists of changing present store building to stores and offices. Brick, 2 stories, 136x22 feet, slag roof, steam heating, electric lighting, tile and marble work. Owners are sub-letting.

Buildings (alts.), Nos. 2, 3, 5, 5A and 10, Job No. 62, Schuylkill Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. E. Boller, Schuylkill Arsenal, Philadelphia. Terra cotta fireproofing, fire doors, rolled steel sash, cement floors, hollow tile, metal lath, wire work. Owners have received bids.

Store Front and Addition, 2823 Girard avenue, Philadelphia, \$2,500. Architect, private plans. Owner, Gus G. Leins, 2834 Girard avenue, Philadelphia. Brick, 1 story, 9x16 feet, flush bulks. Owner is taking bids. E. J. Kreitzburg, 1345 Arch street; P. Haibach Cont. Co., Twenty-sixth and Thompson streets, and Wm. Koelle & Co., Twenty-sixth and Oxford streets, are figuring.

Store (alts.), 1207 Chestnut street, Philadelphia. Architect, Frederick Webber, Morris Building, Philadelphia. Owners, Oppenheim Collins & Co., on premises. New elevator doors,

grilles, new mezzanines, ventilators. Architect has received bids.

Buildings (5) (alts.), Schuylkill Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Philip A. Scholl, Schuylkill Arsenal. Terra cotta fireproofing and fire doors for buildings. Owners have received bids.

Garage, Twenty-first and Venango streets, Philadelphia. Architect, Chas. F. Parker, 5018 Schuyler street, Philadelphia. Owner, Wm. H. Brehm, on premises. Brick, 2 stories, 27x35½ feet, and portico, 10x7 feet, asbestos shingle roof, steam heating, electric lighting, cement floor. Owner has received bids.

Automobile Show Room and Store Room, 3943 North Broad street, Philadelphia. Architects, Andrew J. Sauer & Co., 908 Chestnut street, Philadelphia. Owners, Haas Automobile and Supply Co., 4303 North Fifteenth street, Philadelphia. Brick, 3 stories, 20x110 feet, steam heating, electric lighting, hollow metal skylights, metal bulks. Architects taking bids, due June 27th. Smith-Hardican Co., 1006 Cherry street; Lam Building Co., 1001 Wood street, and Joseph Levin, 1530 South Sixth street, are figuring.

Gun Drill Room, Spec. 3067, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 2 stories, 100x100 feet, and 1 story, 14x15 feet, ready roof, concrete foundations, steam heating, electric lighting, rolled steel sash, roof ventilators, concrete floors. Owners taking bids, due June 26th at 11 A. M. Wark-Yardley Co., 1737 Filbert street, and Wm. R. Dougherty, 1610 Sansom street, Philadelphia, are figuring.

Residence (int. alts.), 2231 North Thirty-third street, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner's name withheld. General interior alterations, mill work, electric lighting, tile work. Architect taking bids. F. L. Hoover & Sons, 1023 Cherry street, are figuring.

Power House, Sixteenth and Hunting Park avenue, Philadelphia. Architect, W. E. S. Dyer, Land Title Building, Philadelphia. Owners, Bellevue Worsted Mills Co., care of Benj. W. Greer, Wistar street and P. and R. R. E. R. Brick, steel and concrete, 1 story, 30x85 feet. Owners will build on time and material basis.

Store Building (alts.), 908 Walnut street, Philadelphia, \$4,500. Architect, LeRoy B. Rothschild, Bulletin Building, Philadelphia. Owner, J. Lipschutz, care of architect. Consists of flush bulks, steam heating, plumbing, tile work, rolled steel skylights, hardwood floors, glazing, marble work. Architect taking bids. Lam Building Co., 1001 Wood street, and Stacy Reeves & Son, 2011 Market street, E. E. Hollenback, Inc., 1804 Brandywine st., are figuring.

Office Building, Thirty-sixth and Gray's

Ferry Road, Philadelphia. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Third floor addition, brick, 122 x41 feet, slag roof, hardwood floors (steam heating, electric lighting and plumbing reserved), roof ventilators. Owners taking bids, due June 28th. H. E. Baton, Pesser Building; J. Sims Wilson Co., 1125 Brown street, are figuring.

School (alts. and add.) (fire tower), Seventeenth and Ritner streets. Architects, E. F. Durang & Sons, 1220 Walnut street, Philadelphia. Owners, St. Monica's R. C. Church, care of Rev. J. J. Walsh, on premises. Stone, third story addition, 24x16 feet and 144x80 feet. Architects taking bids, due June 28th. John McShaine, 1610 North street; Wm. J. McShane, 417 South Thirteenth street; Roger Atkinson, Builders' Exchange; Wark-Yardley Co., 1737 Filbert street; Wm. R. Dougherty, 1610 Sansom street; Daniel W. O'Dea, 5227 North Fifth street, and Sutton & Stephenson, 1317 Washington avenue, Philadelphia, are figuring.

Residence (add.), 1924 East Dauphin street, Philadelphia. Architects, Magaziner & Eberhart, 603 Chestnut street, Philadelphia. Owner's name withheld. Brick, 3 stories, general interior changes. Architects taking bids. Wm. R. Dougherty, 1610 Sansom street, and B. Bornstein, 1510 North Franklin street, are figuring.

Annex Building Structural Shop, Spec. 3063, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete and steel, 1 story, 87x21 feet and 21x21 feet, slag roof, hollow tile, rolled steel sash and skylights, fire doors (plumbing fixtures reserved). Owners taking bids, due July 1st. P. J. Boas, 201 North Broad street, is figuring.

Buildings (alts.), Fifth and Chestnut sts., Philadelphia. Architect, private plans. Owners, City of Philadelphia, Bureau of City Property, Department of Public Works, George E. Datesman, Director, Room 113, City Hall, Philadelphia. Repairs to roofs, fireproofing and heating repairs. Owners taking bids, due July 2nd at noon. (\$5.00 deposit required.)

Apartment House (alts.), northeast corner of Broad and Norris streets. Architect, LeRoy Rothschild, Bulletin Building, Philadelphia. Owner, Estate of Anna Moore, care of architect. Heating, hot water, electric lighting, tile work, plastering. Architect taking bids, due June 28th. D. Henwood, 1509 Wood st.; Lam Building Co., 1001 Wood street; Stacy Reeves & Son, 2011 Market street; E. E. Hollenback, Inc., 1804 East Brandywine street, and I. A. Dunkelberger, 71 East Herman st., are figuring.

Rectory (alts. and add.), Fourth and Reed streets, Philadelphia. Architect, George I. Lovatt, 415 Walnut street, Philadelphia. Own-

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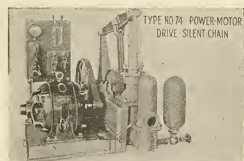
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Pennsylvania Building

ers, St. Alphonsus' R. C. Church, care of Rev. Bernard Phillips, rector, Fourth and Reed streets. Consists of general interior alterations. Architect taking bids, due July 1st. Edw. Fay & Son, 2 South Mole street; Doylo & Co., 1519 Sansom street; Wm. R. Dougherty, 1610 Sansom street; Wm. J. McShane, 417 South Thirteenth street, and Bailey-Insh Co., 201 North Broad street, are figuring.

Residence (add.), Germantown, Philadelphia. Architect, Mantle Fielding, 28 West Walnut Lane, Germantown. Owner's name withheld. Stone, 3 stories, 24x36 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Architect taking bids, due June 27th. Wm. J. Gruhler & Co., 219 East High street, is figuring (only bidder).

Rectory (add.), Seventeenth and Rifter sts., Philadelphia. Architects, Henon & Boyle, 10 South Eighteenth street, Philadelphia. Owners, St. Monica's R. C. Church, care of Rev. John J. Walsh, rector, on premises. Stone and brick, 2 stories, 11½x31 feet and 20x66 feet, slag roof, pine floors, electric lighting, tile and marble work (heating and plumbing reserved). Architects taking bids, due June 28th. Daniel W. O'Dea, 4523 North Fifth street; John McShain, 1610 North street; Melody & Keating, 1322 Race street; Bernard J. McKenna, 1927 West Somerset street, and Smith-Hardican Co., 1606 Cherry street, Philadelphia, are figuring.

Apartment House, Forty-fourth and Walnut streets, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner's name withheld. Brick and stone, 3 stories, 62x80 feet. Plans in progress. Too early for details.

Store Buildings (alts.), southeast corner of Broad and Pine streets, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owners, Kahn & Greenberg, Morris Building, Philadelphia. Plans in progress. Too early for details.

Store (alts.), 230 Callowhill street, Philadelphia. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owner, Julius Olsheski, care of Continental-Equitable Trust Co., trustee, Stephen Girard Building, Philadelphia. New front, brick and plaster, tile work. Architect taking bids. John McShain, 1610 North street; Matthew King, 3714 Fairmount avenue; Raith Const. Co., 304 Master street; E. J. Kroitzburg, 1345 Arch street;

A. L. Fretz & Son, Heed Building; George Mink, 2207 Chestnut street, are figuring.

Residence (alt. and add.), Sixty-eighth avenue and Thirteenth street, Oak Lane, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, David Atlas, southwest corner of Sixty-eighth avenue and Thirteenth street, Oak Lane. Interior alterations, new partitions (heating, electric wiring and painting reserved), tile and marble work, tin roof, hardwood floors, terra cotta flue lining. Architects taking bids, due June 28th. In addition to those previously reported, W. O. Springer, 1624 Latimer street; Wm. R. Dougherty, 1610 Sansom street; H. Seidman, 1312 North Sixth street, and M. Marks, Sixth and Laray streets, are figuring.

Store and Rooming House Building (alts.),

Eighteenth and Ridge avenue. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Ridge Avenue Farmers' Association, on premises. Brick, 4 stories, 46x56 feet. Architect taking bids on new store fronts, due June 29th. E. E. Hollenback, Inc., 1804 Brandywine street; P. Hailbach Const. Co., Twenty-sixth and Thompson streets; P. A. Havens & Co., 345 N. Tenth street, and Geo. M. Evans, 45 North Thirteenth street, are figuring.

Buildings (alts.), Fifth and Chestnut sts., Philadelphia. Architect, private plans. Owners, City of Philadelphia, Bureau of City Department of Public Works, Geo. E. Datsman, Director, Room 113, City Hall, Philadelphia. Repairs to roofs, fireproofing and heating repairs. Owners taking bids, due July 2nd at noon. W. W. Anstine & Co., 1218 Filbert street, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Machine Shop, Stockley street, north of Westmoreland street, \$25,000. Architect, private plans. Owners, Hero Manufacturing Co., Gaul and Adams streets, Philadelphia. Steel, concrete and brick, 1 story, 200x40 feet. Contract awarded to the Austin Co., Bulletin Building, Philadelphia.

Furnace House, Thompson and Huntingdon streets, Philadelphia, \$20,000. Architect, private plans. Owners, John T. Lewis & Bro. Co., Lafayette Building, Philadelphia. Brick, concrete and steel, one-story addition, 52x221 feet. Contract awarded to Turner Concrete Steel Co., 1713 Sansom street, Philadelphia.

Store Building, 232-34 North Fifteenth st., Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Benj. Alexander, care of architect. Brick (slow burning construction), 2 stories, 40x120 feet, slag roof, stone foundations, electric lighting, tile work, hollow metal skylights, fire doors, pine and composition floors, metal lath, elevators, metal ceilings (heating reserved). Con-

tract awarded to D. Henwood, 1509 Wood street, Philadelphia.

Banking House, 6324-26 Woodland avenue, Philadelphia, \$4,000. Architect, private plans. Owners, Logan Trust Co., 1431 Chestnut street, Philadelphia. Interior alterations, brick and granite work, slag roof, steam heating, electric lighting, pine floors. Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Store (alts.), northeast corner of Broad and Germantown avenues, \$2,000. Architect, private plans. Owners, Louis K. Liggett Co., New York City. Plate glass front, general interior alterations. Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Factory (add.), Twenty-sixth, between Morris and Moore streets, Philadelphia, \$40,000. Architect, private plans. Owner, Chas. A. Shetzline, 2021 South Broad street, Philadelphia. Brick and concrete (slow burning construction), 1 story, 12 feet high, 66x400 feet,

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slag roof, cement floors, stone foundations, hollow metal skylights, fire doors, roof ventilators. Contract awarded to H. F. Dinkelacker, 227 North Parson street, Philadelphia.

Machine Shop (add.), Twenty-third and Passyunk avenue, Philadelphia, \$20,000. Architect, private plans. Owner, Burton C. Simon, Nineteenth and Passyunk avenue, Philadelphia. Brick and steel, 1 story, 64x136 feet, slag roof, stone foundations. Contract awarded to H. F. Dinkelacker, 227 North Parson street, Philadelphia.

Machine Shop, Shiller street, between Tenth and Eleventh streets, Philadelphia, \$13,000. Architect, private plans. Owners, Gosa Brockman Co., 12 North Fifth street, Philadelphia. Brick, 1 story, 60x62 feet, slag roof, concrete floors, hollow metal sash, fire doors. Contract awarded to F. L. Hoover & Son, 1023 Cherry street, Philadelphia.

Church, 4311-13 North Eighteenth street, Philadelphia, \$6,000. Architect, private plans. Owners, Apostolic Holiness Church, on premises. Stone, 2 stories, 30x34 feet, slag roof. Contract awarded to Frank K. Stahl, 2713 N. Park avenue, Philadelphia.

Manufacturing Building, Richmond and Tioga streets. Architects, Wm. Steele & Sons

Co., Sixteenth and Parkway, Philadelphia. Owners, Dill & Collins Co., on premises. Brick, 1 story and 3 stories, 188x34 feet, slag roof, cement floors, electric lighting, rolled steel sash. Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia.

Mill (alts. and add.), Nixon street and Leverington street, Manayunk. Architect, Albert C. Wood, Stock Exchange Building, Philadelphia. Owners, Wabash Mills Co., on premises. Brick and concrete, slag roof, cement floors, electric lighting, rolled steel sash (plumbing, heating, electric work reserved). Contract awarded to E. L. Cuthbertson, 334 Roxborough avenue Roxborough.

Residences (40), Devereaux and Jackson streets, \$112,900. Architect, private plans. Owners, Provident Const. Co., on premises. Brick, 2 stories, 15x40 feet, steam heating, electric light, slag roof. Owners are sub-letting.

Residence, Island Road and Bartram avenue, \$8,000. Architect, private plans. Owner, Harry Klosterman, on premises. Brick, 2 stories, 36x40 feet, slag roof, hot water heating. Contract awarded to Wm. J. Mitchell, Island Road and Lyons avenue.

(let and owner will take bids in a week.

Residence and Garage, Towanda, Pa. Architects, De Armond, Ashmad & Bickley, Franklin Trust Building, Philadelphia. Owner, Carl V. S. Patterson, Towanda, Pa. Frame and stucco, 2½ stories, 30x60 feet, wing 25x25 feet; garage, 1 story, 15x22 feet, white pine shingle roof, hot air heating, hardwood floors. Architect taking bids. Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia, figuring.

Office Building, Audenried, Pa., \$40,000. Architects, Sturdevant & Poggi, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh and Wilkes-Barre Coal Co., Wilkes-Barre, Pa., care of C. F. Huber, president. Brick, 2 stories, 31x61 feet, asbestos shingle roof, concrete and tile floors, steam heating, electric lighting, tile and marble work, hollow metal sash, metal lath, iron stairs. Architects taking bids. H. L. Campbell, and Geo. Woodring, Hazleton, Pa., are figuring.

Church, Pittston, Pa., \$15,000. Architects, Morris & McHale, Burr Building, Scranton, Pa. Owners, Church of the Immaculate Conception, care of Rev. J. J. Cox, Pittston, Pa. Frame, 1 story and basement 39x81 feet, slate roof, steam heating, electric lighting. Architects have received bids.

Bridge No. 5, north of McAuley, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete and steel, 317x24 feet. Owners have received bids.

Factory Building, Holmesburg Junction, Pa. Architect, private plans. Owners, Bessemer Motor Truck Co., Grove City, Pa. Brick, steel and concrete, 1 story, 90x440 feet, slag roof, concrete floors, hollow tile, metal lath, rolled steel sash, fire doors, roof ventilators (plumbing, heating and electric work reserved). Crowell, Lundoff & Little, Widener Building, Philadelphia, are taking sub-bids.

Residence, West End, Lancaster, Pa., \$4,500. Architect, Malvern R. Evans, 10½ East Orange street, Lancaster, Pa. Owner, Abram Hoggentoghtler, Lancaster, Pa. Hollow tile and stucco, 2½ stories, slate roof, hot air heating, electric lighting. Plans in progress. Will take bids in two weeks.

New Building, Unit No. 2, East End, Lancaster, Pa., \$60,000. Architect, Malvern R. Evans, 10½ East Orange street, Lancaster, Pa. Owners, Rowe Motor Manufacturing Co., care of Samuel Rowe, Lancaster, Pa. Reinforced concrete and steel, 1 story and basement, 200x120 feet, composition roof, cement floor, steam heating, electric lighting, composite lath, fire doors. Architect taking sub-bids.

School (add.), Hershey, Pa. Architect, C. Emilen Urban, Lancaster, Pa. Owners, Hershey Industrial School, care of M. S. Hershey, Hershey, Pa. Brick, 2 stories and basement, 40x90 feet, slate roof, steam heating, electric lighting. Plans in progress. Owners will take sub-bids in one week.

Store Building (alts. and add.), North King street, Lancaster, Pa., \$5,000. Architect, Malvern R. Evans, 10½ East Orange street, Lancaster, Pa. Owner, John P. Krous, Lancaster,

PENNSYLVANIA Construction News

Warehouse, Mifflin street, Scranton, Pa. Architect, Gilbert N. Edson, Connell Building, Scranton, Pa. Owners, Spruiks Bros., Scranton, Pa. Brick, 1 story, 100x150 feet, slag roof, steam heating, electric lighting. Owners will build. Architect will superintend construction.

Theatre (alts.), Freeland, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Freeland Opera House, care of Rev. C. J. Manley, Freeland, Pa. Consists of general interior alterations, painting, plastering, carpenter work, reinforced concrete work. Owners taking bids.

Comfort Station, Providence Square, Scranton, Pa. Architects, Duckworth Bros., Coal Exchange Building, Scranton, Pa. Owners, City of Scranton, Department of Public Safety, care of Robert W. Allen. Brick, 1 story, 70x30 feet, Barrett roof, cement floors, indirect heating (electric lighting and plumbing reserved), tile and marble work. Owners ready for bids.

Residence, Scranton, Pa. Architect, Lewis Hancock, Meers Building, Scranton, Pa. Owner, S. J. Jennings, Scranton, Pa. Brick, 2½ stories, 36x37 feet, shingle, cressote dipped work, hardwood floors, steam heating, electric lighting, tile work. Plans about completed. Bids will be taken in one week.

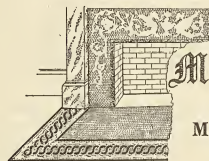
Houses (71), Swedeland, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Alan Wood Iron and Steel Co., Widener Building, Philadelphia.

Brick and stone, 2 stories, 18x29 feet and 21x29 feet, slate roof, pine floors, stone foundations (plumbing, hot air heating and electric lighting reserved). Architects taking bids, due June 26th at noon. R. C. Ballinger & Co., 218 North Thirteenth street; Roydhouse-Arey Co., 112 North Broad street; A. B. Millet, 1903 Venango street; Barclay White Co., 1713 Sansom street; H. E. Grau Co., 1707 Sansom street; H. E. Baton, 1713 Sansom street; F. A. Havens Co., 843 North Nineteenth street; Pomeroy Const. Co., 1609 Ranstead street; Irwin & Leighton, 126 North Twelfth street, Philadelphia; and Frank R. Heavner, Norris-town, Pa., are figuring.

Hotel Building, near Sun Shipbuilding Plant, Chester, Pa. Architect, L. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Greenstein, Chester, Pa. Brick and structural steel, 3 stories, 80x80 feet (will contain 150 rooms and cafe), stone foundations, concrete footings, slag roof, yellow pine and reinforced concrete floors, cement work, hot water heating, electric lighting, tile and marble work, rolled steel sash, fire doors, reinforced concrete fire tower, metal lath, safety treads, dampproofing, ornamental iron work. Plans in progress. Owner and architect will be ready for bids in one week.

Residences (12), Chester, Pa. Architect, L. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Greenstein, Chester, Pa. Brick, 2 stories, 16x30 feet, stone foundations, concrete footings, slag roof, hot air heating, electric lighting, yellow pine floors. Archi-

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Pa. Brick, interior alterations, plate glass, steam heating, electric wiring, maple and oak floors, cement work. Architect taking bids, due June 26th. H. C. Wiant, H. Stumpf, and Wm. Fleck, all of Lancaster, Pa., are figuring.

School, West Manchester Township, Pa., \$35,000. Architects, Gemmell & Billmeyer, Rossmiller Building, York, Pa. Owners, School Board of Manchester Township, care of Louis Weidie, 517 Pennsylvania avenue, York, Pa. Brick, 1 story (4 rooms), slate roof, pine floors (steam heating, plumbing, electric work, skylights and copper work separate bids). Architect taking bids, due July 3rd.

Garage and Farm Building (rebuilding), Elkins Park, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Howard A. Loeb, Elkins Park, Pa. Stone, 2 stories, 27x90 feet, repairing fire damage. Joseph Ashby, Second street pike, Fox Chase, Philadelphia, is giving preliminary bid.

Schools (2), Lester and Essington, Pa. Architect, Clyde S. Adams, 1509 Arch street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick and stone, 2 stories, 85x102 feet. Plans completed. Architect ready for bids, due July 1st.

Factory, West Reading, Pa. Architect, A. Meyer, Textile Machine Works, Wyomissing, Pa. Owners, the Narrow Fabric Co., Wyomissing, Pa. Brick and reinforced concrete, 4 stories and basement, 22x90 feet, slag roof, cement, wood and granolithic floors (heating, and electric wiring reserved), rolled steel sash, Kinner steel doors, elevators, safety treads, waterproofing, ornamental iron work. Owners taking bids, due July 1st. Pomeroy Const. Co., 1609 Ranstead street, Philadelphia, is figuring.

Residence, Adams County, Pa., \$7,000. Architect, Malvern R. Evans, 10½ East Orange street, Lancaster, Pa. Owner, J. R. Musselman, care of architect. Brick, 2½ stories, 34x20 feet, back building, 20x20 feet, slate roof, yellow pine floors, hot water heating, electric lighting. Owner taking sub-bids.

Warehouse (alts. and add.), York, Pa., \$15,000. Architect, J. A. Dempwolf, York, Pa. Owners, York Chemical Works, care of Chas. H. Dempwolf, on premises. Brick, 1 story, 40x40 feet, corrugated roof. Owners are taking sub-bids.

Almshouse (alts. and add.), York, Pa., \$100,000. Architect, Robert A. Stair, Jr., York, Pa. Owners, Poor Board, care of Secretary, York, Pa. Brick, 4 stories, 135x150 feet, slate roof, steam heating, electric lighting, tile work,

metal lath, fire doors. Lowest bid submitted by Samuel Gladfelder, York, Pa.

School, Nicholson, Wyoming County, Pa., \$23,000. Architects, Morris & McHale, Burr Building, Scranton, Pa. Owners, Board of Education of Nicholson, care of architects. Frame and stucco, 2 stories and basement, slag roof, stone foundations, steam heating, electric lighting, tile and marble work, metal lath, roof ventilators, gas plant. Architects will be ready for bids in one week.

Building (add.), Wilkes-Barre, Pa. Architects, Sturdevant & Poggel, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh and Wilkes-Barre Coal Co., care of D. F. Huber, president. Brick, 1 story additional, 54x110 feet, slag roof, steam heating, electric lighting, metal lath, iron stairs. Plans in progress. Too early for details.

Store and Apartments, Nanticoke, Pa., \$10,000. Architect, F. A. Reilly, Bennett Building, Wilkes-Barre, Pa. Owner, Chas. Wasilewski. Nanticoke, Pa. Brick, 2 stories, 34x47 feet, slag roof, pine floors, steam heating, electric lighting, tile work, metal lath. Owner is taking bids.

Residence, Exeter, Pa. Architect, J. J. How-

ley, Scranton, Pa. Owner, George Busha, Exeter, Pa. Frame, 2½ stories, 26x48 feet, slate roof, pine floors, steam heating, electric lighting. Plans in progress. Owner will build.

Theatre (remodeling), Reading, Pa. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Hippodrome Theatre, Reading, Pa. General interior alterations and decorating, steam heating, tile work. Plans in progress.

Schools (2), Lester and Essington, Pa. Architect, Clyde S. Adams, 1509 Arch street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick and stone, 2 stories, 85x102 feet. Architect taking bids. Stacy Reeves & Son, 2011 Market street; Wark-Yardley Co., 1737 Filbert street; Pomeroy Const. Co., 1609 Ranstead street; John R. Wiggins & Co., Otis Building, Philadelphia; Plounders Bros., Media, Pa., and Geo. W. Shaner, Palmyra, N. J., are figuring.

Bungalow and Garage, Cedar Road, Ogontz, Pa. Architects, Drukenmiller & Williams, 1527 Chestnut street, Philadelphia. Owner's name withheld. Hollow tile and plaster, 1½ stories, 32x46 feet, and 1 story, 16x23 feet, shingle roof, vapor or hot air heating, electric lighting, hardwood and cement floor. Plans in progress. Architects will be ready for bids in ten days.

PENNSYLVANIA**Contracts Awarded**

Office Building (add.), Chester, Pa., \$45,000. Architect, W. G. Eekles, New Castle, Pa. Owners, Sun Shipbuilding Co., Chester, Pa. Brick, steel and concrete, 1 story, 120x100 feet, slag roof, steam heating, electric lighting, cement floors, rolled steel sash and skylights, roof ventilators. Contract awarded to Barclay White & Co., 1713 Sansom street, Philadelphia.

Dormitory and Dining Hall, Essington, Pa. Architects, Duhring, Olick & Ziegler, Bailey Building, Philadelphia. Owners, U. S. Government, Emergency Fleet Corp., 140 North Broad street, Philadelphia. Frame, 1 story. Contract awarded to Wm. Crawford, 7 East Forty-second street, New York City.

Ammunition Filling Houses (2), Spec. 3006, Fort Mifflin, Pa., \$55,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and wood, asbestos protected metal, 1 and 2 stories, 160x30 feet and 145x30 feet, composi-

tion roof, wood and cement floors, concrete foundations, vacuum heating, electric lighting, rolled steel sash, roof ventilators. Contract awarded to Wark-Yardley Co., 1737 Filbert street, Philadelphia.

Drug Store (new front), 58 South Main st., Wilkes-Barre, Pa., \$5,000. Architect, George Schroeder, Wilkes-Barre, Pa. Owners, Kennedy's Cut Rate Drug Store, 58 South Main street, Wilkes-Barre, Pa. Steam heating, electric lighting, tile and marble work. Contract awarded to A. N. Hildebrandt, Wilkes-Barre, Pa.

Residence, Haverford, Pa. Architects, Bissell & Sinkler, Otis Building, Philadelphia. Owner, Dr. Francis W. Sinkler, 1606 Walnut street, Philadelphia. Brick, 2½ stories, 37x69 feet, shingle and tin roof, oak and pine floors, metal lath (heating, electric lighting and hardware reserved), tile work. Contract awarded to Gray Bros., Rosemont, Pa.

Cottage, Harveys Lake, Pa., \$6,000. Architect, Geo. Schroeder, Wilkes-Barre, Pa. Own-

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Office Building, Prince and Hager streets, Lancaster, Pa., \$30,000. Architect, Henry Y. Shawb, Imperial Building, Lancaster, Pa. Owners, Lancaster Iron Co. Inc., care of W. W. Posey, Lancaster, Pa. Brick, 2 stories, 40x80 feet, slag roof, stone foundations, steam heating, electric lighting, marble work, linoleum floors, hollow tile, metal lath, fire doors, dampproofing, gasoline storage, iron beams. Contract awarded to Jos. Brennenman, Lancaster, Pa., on percentage basis.

Garage, rear of 549 Lime street, Lancaster, Pa., \$3,500. Architect, Henry Y. Shawb, Imperial Building, Lancaster, Pa. Owner, Walter E. Frame, 549 Lime street, Lancaster, Pa. Brick, 2 stories, 25x40 feet, slate roof, cement floors, hot air heating, electric lighting, gasoline storage system. Contract awarded to D. S. Warfel, Lancaster, Pa.

Factory (alts. and add.), Liberty street, Lancaster, Pa., \$20,000. Architect, Malvern R. Evans, 10½ East Orange street, Lancaster, Pa. Owners, Bottlenfield Tire Co., care of Chas. Newbold, secretary, Lancaster, Pa. Brick, 1 story, 155x40 feet, composition roof, wood block and cement floors, steam heating, electric lighting, iron beams. Contract awarded to H. L. Wiant, Lancaster, Pa., on percentage basis.

taking bids, due July 5th. W. O. Springer, 1624 Latimer street, and Thos. C. Trafford, 1613 Sansom street, Philadelphia, are figuring.

Emergency Hospital (6 Buildings), Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Department of Yards and Docks, Navy Department, Washington, D. C. Wood on concrete piles, 1 story, 126x23 feet, 55x61 feet, 156x23 feet, 115x37 feet, 150x31 feet and 100x27 feet, ready roof, pine floors, steam heating, electric lighting, painting, glazing, plumbing, roof ventilators. Lowest bidder, Dawson Const. Co., May Building, Pittsburgh, Pa.

Pasteurizing Plant, Morris Plains, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile and stucco, 1 and 2 stories, 24x36 feet, asphalt shingle roof, shower baths, steam heating and cement floors, iron angles. Architect taking bids, due June 28th. J. J. Lyons, Morristown, N. J.; Geo. W. Downs, Madison, N. J.; J. A. Lindstrom, Morris Plains, N. J., and James Fraser, Morris Plains, N. J., are figuring.

Residence, 140 West State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, F. S. Melvaine, care of architect. Brick, general interior alterations, 3 stories, steam heating, electric lighting, hardwood floors. Plans completed. Architect will take bids in a few days.

Store Building (alts.), 8-10-12 East State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, F. A. Dugan, Trenton, N. J. Brick and stucco, 2 stories, steam heating, electric lighting, pine floors. Owner is taking sub-bids.

Hospital (add.), Trenton, N. J., \$90,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State of New Jersey, Board of Directors, State Hospital for Insane, Trenton, N. J. Brick or stone, 3 stories and basement, 40x170 feet, slag roof, fireproof floors, vacuum heating, electric lighting. Architect taking bids, due June 28th. Matthews Const. Co., Princeton, N. J.; the Carleton Co., Longacre Building, New York City; Altieri Const. Co., 101 Park avenue, New York City, and Burton & Burton and Harry Hilton, both of Trenton, N. J., are figuring.

Bungalows (2), Morris Plains, N. J., \$8,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile, 2 stories, 53x36 feet, asbestos shingle roof, steam heating, electric lighting tile work. Architect taking bids, due June 28th. J. J. Lyons, Morristown, N. J.; J. A. Lindstrom, Littleton Road, Morris Plains, N. J.; James Fraser, Morris Plains, N. J.; Geo. W. Downs, Madison, N. J., and W. Storgis, Morristown, N. J., are figuring.

School (alts. and add.), Trenton, N. J., \$17,500. Architect, F. H. Bent, State Capitol,

er, Mrs. Rose Rosenthal, Wilkes-Barre, Pa. Frame and stone, 1½ stories, 28x50 feet, shingle roof, pine floors, hot water heating, electric lighting, tile work. Contract awarded to Amos Kitehen, Alderson, Pa.

Roosevelt School (add.), Olyphant, Pa. Architect, J. J. Howley, Scranton, Pa. Owners, School Board of Olyphant, Olyphant, Pa. Frame and stucco, 2 stories and basement, 43x72 feet, slate roof, steam heating, electric lighting, yellow pine floors. Contract awarded to P. F. Caveston, Carbondale, Pa.

Store Building (int. alts.), No. 2 South Main street, Wilkes-Barre, Pa., \$4,000. Architect, Geo. F. Schroeder, Weitzenkorn Building, Wilkes-Barre, Pa. Owner, J. D. Williams, on premises. Brick, 1 story, steam heating, electric lighting, metal lath, metal ceilings, iron work. Contract awarded to Walborn & Barney, Wilkes-Barre, Pa.

NEW JERSEY Construction News

Isolation Hospital, Jamesburg, N. J., \$2,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Home for Boys, care of architect. Frame, 1 story, 30x18 feet, shingle roof, steam heating, electric lighting. Architect taking bids, due June 27th. C. Y. Barlow and Harry Hilton, both of Trenton, N. J., additional bidders.

Assembly Hall, Jamesburg, N. J., \$40,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Board of Managers, State Home for Boys, Jamesburg, N. J. Brick and steel trusses, 1 story, 68x123 feet, slate roof, steam heating, electric lighting, metal lath. Owners taking bids, due June 27th. C. Y. Barlow and Harry Hilton, both of Trenton, N. J., are figuring.

Store Room, Vineland, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Home for Public-Minded Women, Vineland, N. J. Brick, 1 story, 50x64 feet, slag roof, yellow pine floors, electric lighting. Only bid submitted by Geo. W. Shaner & Son, Palmyra, N. J., \$20,685.

Sewage Disposal Plant, Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Normal Training and Industrial School for Colored Youths, Borden-

town, N. J. Reinforced concrete and steel, 17x24 feet, 6 feet deep, pipe and terra cotta, waterproofing. Lowest bidder, New York Sewage Disposal Co., 37 East Twenty-eighth street, New York City.

Double Tenement House (repairs), Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Manual Training and Industrial School for Colored Youths, care of Board of Education, Trenton, N. J. Frame and stucco, 2½ stories, 27x45 feet, shingle roof, steam heating, electric lighting. Lowest bid submitted by Charles Finnmore, Bordentown, N. J.

Administration Building and Superintendent's House, Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Manual Training and Industrial School, Bordentown, N. J. Brick, 2½ stories, 117x20 feet and 2 wings 50x19 feet, shingle roof, steam heating, electric lighting. Lowest bid submitted by C. Y. Barlow, Trenton, N. J.

Quarters for Marine Detachment and Naval Radio Station, Spec. No. 3126, near Tuckerton, N. J. Architect, private plans. Owners, U. S. Government, care of De Witt C. Webb, Navy Yard, Philadelphia. Wood, 1 story, 55x81 feet, ready roof, electric lighting. Owners

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Trenton, N. J. Owners, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, wing 24x24 feet, steam heating. Architect taking bids, due June 27th at noon. Fenimore & Pirth, Bordentown, N. J.; Samuel Wiley, Trenton, N. J., and Burton & Burton, Trenton, N. J., are figuring.

Administration Building, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick, steel and concrete and terra cotta, 3 stories, 224x44 feet, asbestos roof, maple floors, metal window guards. Owners taking bids. Wm. R. Dougherty, 1610 Sansom street, and Stacy Reeves & Sons, 2011 Market street, are figuring.

Shop Yard Buildings, Gloucester, N. J., \$5-

000,000. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Includes office buildings, machine shops, riggers' lofts, paint shops, warehouses, shelter buildings, galvanizing plant, etc. Contract for structural steel and steel buildings awarded to McClintic-Marshall Co., Pittsburgh, Pa. Contract for construction and foundations awarded to Hugh Nawn Const. Co., Boston, Mass.

Office Building, Camden, N. J. Architects, Day & Zimmerman, 608 Chestnut street, Philadelphia. Owners, Cleveland Worsted Co., Cleveland, Ohio. Brick, 1 story, 30x40 feet, slag roof, pine floors, electric light. Contract awarded to Wm. W. Wifford, Camden, N. J.

Drake (C), 3139 Frankford avenue, Philadelphia. Brick, 1 story, 21x88 feet, reinforced concrete floors and roof.

Garage, 5266 Addison street, Philadelphia, \$750. Wm. W. Moore (O and C), on premises. Brick, 1 story, 12x15 feet, slag roof, stone foundations.

Machine Shop, Stockley street, north of Westmoreland street, \$25,000. Hero Manufacturing Co. (O), Gaul and Adams streets, Philadelphia. Austin Company (C), Bulletin Building, Philadelphia. Steel, 1 story, 200x40 feet.

Garages, 6502-04-06-10-14-16 North Eighth street, Philadelphia, \$4,800. Stephen Fohm (O), York Road and Chelten avenue, Philadelphia. H. Hope (C), 5901 York Road, Philadelphia. Brick, 1 story, 13x21 feet, stone foundations, slag roof.

Garages, 6506-12 North Eighth street, Philadelphia, \$1,600. Stephen Fohm (O), York Road and Chelten avenue, Philadelphia. H. Hope (C), 5901 York Road, Philadelphia. Brick, 1 story, 12x20 feet, stone foundations, slag roof.

Garage, 6302 Drexel Road, Philadelphia, \$1,500. Wm. Fleck (O), on premises. Geo. W. Roberts (C), 1105 East Chelten avenue, Philadelphia. Brick, 1 story, 18x24 feet, slate roof, stone foundations.

Garage, 1306 Orthodox street, Philadelphia, \$600. Chas. Maryns (O), on premises. S. Glickman (C), 850 North Eighth street, Philadelphia. One story, 12x20 feet, slag roof, stone foundations.

Dwellings (13), 4630-4654 North Warnock street, Philadelphia, \$45,500. Wm. J. Baltz (O and C), 709 Butler street, Philadelphia. Brick, 2 stories, 15x28 feet, slag roof, stone foundations, hot water heating.

Manufacturing Building, Eighth and Bartram's avenue, Philadelphia, \$86,000. Richard L. Wallace & Co. (O), 120 Chestnut street, Philadelphia. Concrete Const. Co. (C), 1418 Thompson street, Philadelphia. Brick, 1 story, 340x340 feet, concrete foundations, slag roof.

Garage, 4719 Windsor avenue, Philadelphia, \$475. E. L. Townsend (O), 4933 Osage avenue, Philadelphia. Max Richey (C), 5008 Pentridge street, Philadelphia. Brick, 1 story, 10x20 feet, slag roof, stone foundations.

Dwellings (6), Römöna and Foulkrodt streets, Philadelphia, \$4,000. John Fotheringham (O and C), Arrot and Castor Road, Philadelphia. Brick, 2 stories, 16x43 feet, stone foundations, slag roof.

Alterations and Additions

Factory, Twenty-sixth street, between Morris and Moore streets, Philadelphia, \$40,000. Chas. A. Shetzline (O), 2021 South Broad street, Philadelphia. W. F. Dinkelacker (C), 227 North Farson street, Philadelphia. Brick, 1 story, 66x40 feet.

Dwelling, 7045 Saybrook avenue, Philadelphia, \$300. Mrs. Humphreys (O), 7026 Woodland avenue, Philadelphia. Geo. S. Rac (C), 6949 Saybrook avenue, Philadelphia. Repair fire damages.

Theatre, Broad and Snyder avenue, Philadelphia, \$9,000. Broadway Theatre Co. (O), Broad and Snyder avenue, Philadelphia. Ketcham & McQuade (C), 1029 Brown street, Philadelphia. Cement floors, interior alterations.

Shop, 1021-23 East Columbia avenue, Philadelphia, \$5,000. Elisha Webb & Son (O and C), 136 South Front street, Philadelphia. Brick, 1 story, 40x109 feet, slag roof, cement floors.

Miscellaneous Construction News

Office Building, Irving Park, Greensboro, N. C. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owners, Southern Life and Trust Co., care of A. W. McAlister, president, Greensboro, N. C. Reinforced concrete, fireproof, 2 stories, 170x65 feet, tile roof, fan system heating, electric lighting, tile and marble work, cement floors, hollow tile, metal lath. Plans in progress.

Residence, Greensboro, N. C. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owner, A. W. McAlister, Greensboro, N. C. Hollow tile and stucco, 2½ stories, 50x128 feet, slate roof, hardwood floors, vapor heating, electric lighting. Owner is sub-letting. Building, John T. Hunt, Greensboro, N. C., will superintend construction.

Barracks (for 240 men), New London, Conn. Spec. 2006, \$75,960. Architect, private plans. Owners, Department of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C., for Fort Trumbull Reservation. Brick, concrete footing, 2 stories, 100x165 feet, composition roof, cement and composition floors, concrete foundations, steam heating, electric lighting, roof ventilators, damp-proofing. Contract awarded to Matthew I. O'Connor, Northampton, Mass., 60 days.

Residences (550), Quarters for Single Men, Apartments (40), Etc., Wilmington, Del., \$1,250,000. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, U. S. Shipping Board, 1421 Arch street, Philadelphia. Town planner, John Nolen, Cambridge, Mass. Contract awarded to Lynch Const. Co., 52 Vanderbilt avenue, New York City.

U. S. Naval Hospital Reservation Emergency Hospital Buildings (4), Spec. 3070, Norfolk, Va. Architect, private plans. Owners, U. S. Government, Navy Department, care of

C. W. Parks, Chief, Bureau of Yards and Docks, Washington, D. C. Frame, brick and reinforced concrete, 1 story, various sizes, slate, slag and ready roof, cement and wood floors, concrete foundations, electric lighting, steam heating, rolled steel sash and skylights, iron stairs, hollow tile, metal lath, roof ventilators, metal window guards, waterproofing. Owners taking bids, due July 1st. Warren Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Residence, Wilmington, Del., \$8,000. Architects, Thos. Podmore, Bennett Building, and Leon W. Crawford, Wilmington, Del. Owner, W. S. Carpenter, Jr., Wilmington, Del. Frame, 2½ stories, 45x17 feet, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Plans in progress.

Bulkhead, Spec. 6158, Cape Henlopen Light station, Del. Architect, private plans. Owners, Department of Commerce, Light House Service, office of L. I., Fourth District, T. J. Rout, P. O. Building, Philadelphia. Wood, 500x800 feet. Lowest bidder, Wm. A. Russell, Lewes, Del.

Factory, south side of Hunters Point avenue, between Vandan and School streets, New York City. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Patterson-Sargent Co., New York City. Brick, steel and concrete. Architects taking bids, due at the New York office, July 1st. Amsterdam Building Co., 140 West Forty-second street; Longacre Const. Co., 11 East Forty-second street; Ruggles Robinson Co., 331 Madison avenue; John T. Brady Co., 103 Park avenue; Jacob Zimmerman Co., Inc., 18 East Forty-second street; Cramp & Co., 25 E. Twenty-sixth street, and Laddy & Moore, 105 West Forty-eighth street, all of New York City, are figuring.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Manufacturing Building, Tioga and Richmond streets, Philadelphia, \$50,000. Dill & Collins (O), Richmond and Tioga streets, Philadelphia. Wm. Steele & Sons Co. (C), Sixteenth street and Parkway. Brick, stone foundations, slag roof, 55x55 feet.

Dwelling, Clarkson avenue and Eleventh

street, Philadelphia, \$3,500. Chas. Eckman (O and C), 2126 North Sixteenth street, Philadelphia. Brick, 2 stories, slag roof, hot water heating, 16x40 feet, stone foundations.

Office Building, Delaware avenue and Venango street, Philadelphia, \$12,000. M. L. Shoemaker & Co. (O), on premises. Harry

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Manufacturing Building, Thompson and York streets, Philadelphia, \$300. Chas. Datz & Son (O), 582 North Fifth street, Philadelphia. American Boiler and Furnace Co. (C), Bourse Building, Philadelphia. Brick stack.

Work Shop, Front and Wyoming avenues, Philadelphia. J. C. Hess (O and C), on premises. Brick, 1 story, 16x22 feet, slag roof, stone foundations.

Store and Dwelling, Tenth and Porter sts., Philadelphia, \$900. Joseph Romm (O), 708 South Fourth street, Philadelphia. Sheetmann Bros. (C), 1754 North Seventh street, Philadelphia. Flush bulks.

Machine Shop, Schiller between Tenth and Eleventh streets, Philadelphia, \$13,000. Goso-Beckman Co. (O), 12 North Fifth street, Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street. Brick, 60x62 feet, slag roof, concrete floors.

Church, 4311-13 North Eighteenth street, Philadelphia, \$6,000. Apostolic Holiness Church (O), on premises. Frank K. Stahl (C), 2713 North Park avenue, Philadelphia. Stone, two-story rear arched addition, 30x34 feet, slag roof.

Warehouse, Clarion and Federal streets, Philadelphia, \$300. C. C. Puti (O and C), on premises. Brick, stone foundations.

Dwelling, 2010 South College avenue, Philadelphia, \$810. Girard Trust Co. (O), Broad and Chestnut streets, Philadelphia. J. Morris Daniels (C), 252 South Juniper street, Philadelphia. Repair fire damages.

Storage Shed, Cambria and Park avenues, Philadelphia, \$4,000. J. Anderson Ross Co. (O), 2900 North Broad street, Philadelphia. F. G. Storek (C), 3579 North Thirteenth st., Philadelphia. Brick, 1 story, 31x87 feet.

School, 1323 Spring Garden street, Philadelphia, \$1,815. Board of Education (O), Nineteenth above Chestnut street, Philadelphia. Mitchell Bros. (C), 2125 Race street, Philadelphia. Repairs.

Machine Shop, Twenty-third and Passyunk avenues, Philadelphia. Burton C. Simon (O), Nineteenth and Jackson street, Philadelphia. H. P. Dinkelacker (C), 227 North Farnon st., Philadelphia. Brick, 1 story, 64x136 feet, slag roof.

Dwelling, Sixteenth and Shunk streets, Philadelphia, \$300. H. Devlin (O), Nineteenth and Snyder avenue, Philadelphia. Chas. G. Seidel (C), 2524 South Juniper street, Philadelphia. Brick, 1 story.

Dwelling, 2443 Fairmount avenue, Philadelphia, \$675. J. G. Feeney (O), Twenty-fifth and Pennsylvania avenues, Philadelphia. M. H. Brown (C), 2718 North Twenty-ninth st., Philadelphia. Brick, 12x10 feet, stone foundations.

Garage, Chelton avenue and Musgrave st., Philadelphia, \$2,500. J. Scathara (O), 443 E. Chelton street, Philadelphia. Geo. Sorber & Son (C), 18 Harvy street, Philadelphia. Stone, 1 story, 39x28 feet, slag roof, stone foundations.

Store, Eleventh and Filbert streets, Philadelphia, \$1,800. H. C. Kahn & Son (O), Eleventh and Filbert streets, Philadelphia. Lam Building Co. (C), 1001 Wood street, Philadelphia. Alterations.

Dwelling, 1810 DeLancey street, Philadelphia, \$1,000. A. F. Steel (O), on premises. Owen Fogarty (O), 1918 Cherry street, Philadelphia. Brick, one-story addition, 16x21 feet, slag roof.

Offices, Passyunk avenue and Twenty-eighth street, Philadelphia, \$400. The Atlantic Refining Co. (O and C), 3144 Passyunk avenue. Frame, 10x19 feet.

Dwelling, 654 Commission street, Philadelphia, \$4,000. G. Epplen (O), 456 Commission

street, Philadelphia. H. C. Zuighof, 2527 N. Seventh street, Philadelphia. Flush bulks.

Building, 3341 Ridge avenue, Philadelphia, \$800. Sol Barenbaum (O), on premises. Chris. J. Williams (C), 3200 Arizona street, Philadelphia. Hot water heating system.

Furnace House, Thompson and Huntingdon streets, Philadelphia, \$20,000. John T. Lewis & Bros. Co. (O), Lafayette Building, Philadelphia. Turner Concrete Steel Co. (C), 1713 Sanson street, Philadelphia. Brick, one-story addition, 52x221 feet.

Power House, Tulip and Somerset streets, Philadelphia, \$50,000. Philadelphia and Reading R. R. Co. (O), Reading Terminal, Philadelphia. Pringle Borthwick (C), 8018 Germantown avenue, Philadelphia. Brick, 1 story, 48x77 feet, concrete foundations, asbestos roof, metal sash and doors.

Dwelling, 1948 East Lehigh avenue, Philadelphia, \$1,500. J. Morley (O), on premises. Wm. F. Steinbach (C), 949 East Westmoreland street, Philadelphia. Consists of alterations, tile work.

Dwelling, 114-16 North Seventeenth street, Philadelphia, \$1,200. Wm. Schlegelmuch (O), Commonwealth Building, Philadelphia. Chas. Hoffman (C), 210 Dickinson street, Philadelphia. Fire escapes.

Storage Room, 510 Walnut street (rear), \$900. Pennsylvania Fire Insurance Co. (O), 5508-10 Walnut street, Philadelphia. James Johnston (C), 1721 Ludlow street, Philadelphia. Brick, 1 story, 11x21 feet, slag roof, cement floors.

Store, Chelton avenue and Greene street, Philadelphia, \$500. Estate of Horace McCann (O), 409 East Washington Lane. Samuel Harting (C), 20 John street, Philadelphia. Alterations.

Storage Building, Lyceum, west of Ridge avenue, Philadelphia, \$900. Wm. Stiller (O), W. Hermitage street, Philadelphia. Walter Rowland (C), Lyceum and Deater streets, Philadelphia. Brick, 1 story, 16x21 feet, slate roof, stone or concrete foundations.

Store, Twenty-third and Wallace streets, Philadelphia, \$780. Mr. Hasson (O); 2237 Wallace street, Philadelphia. A. Siernush (C), 1634 Ruffner street, Philadelphia. General interior alterations.

Building, 3343 Carlisle street, Philadelphia, \$2,000. W. W. Battersby (O), Broad and Westmoreland streets, Philadelphia. John W. Mortimer (C), 3024 E street, Philadelphia. Brick, 2 stories, 12x27 feet, slag roof.

Dwelling, 5535 Ridge avenue, Philadelphia, \$2,000. M. Kentworthy (O), on premises. E. R. Clark & Co. (C), 536 East Walnut Lane, Philadelphia. Brick, 19x12 feet, 1 story.

Delivery Shed, northside of Filbert street, 100 feet west of Seventh, extending to Arch street, Philadelphia, \$34,000. Lit Bros. (O), Seventh and Market streets, Philadelphia. Keystone State Const. Co. (C), Franklin Bank Building, Philadelphia. Brick, 1 story and basement, 24x48 feet, reinforced concrete foundations.

Room, Richmond and Ball streets, Philadelphia, \$700. Wm. Gramp & Sons Co. (O), Richmond and Ball streets, Philadelphia. Willard Myers (C), 2000 East Cambria street, Philadelphia. Brick, 15x17 feet, concrete foundations.

Manufacturing Building, 104-6-8 Letterly street, Philadelphia, \$4,000. Wm. Kane (O and C), 1227 West Allegheny avenue, Philadelphia. Brick, slag roof, 1 story, 30x39 feet.

Dwelling, 2325 Almond street, Philadelphia, \$600. Joe Oskola (O and C), on premises. Brick, 2 stories, 8x10 feet, stone foundations.

Manufacturing Building, Bermuda and Margaret streets, Philadelphia, \$15,000. Barret

Manufacturing Co. (O), Philadelphia. A. Raymond Raff Const. Co. (C), 1635 West Thompson street, Philadelphia. Brick, 1 story, 60x65 feet, concrete foundations.

Dwelling, 1406 South Bouvier street, Philadelphia, \$500. G. Scarpa (O and C), on premises. Brick, slag roof.

Stable, Ingersoll, west of Twenty-third st., Philadelphia, \$55,000. Frehofer Baking Co. (O), Twentieth and Indiana avenue, Philadelphia. P. Haibach Const. Co. (C), 1261 N. Twenty-sixth street, Philadelphia. Repair fire damages.

Building, 1854 Frankford avenue, Philadelphia, \$500. T. C. Werner (O and C), 623 W. Erie avenue, Philadelphia. Brick, alterations.

Office and Factory Building, Eighth and Glenwood avenue, Philadelphia, \$4,000. North American Lacc Co. (O), Eighth and Allegheny avenue, Philadelphia. Wm. Steele & Sons Co. (C), Sixteenth and Parkway. Cement floors, tunnel.

Dwelling, 1114 South Fifteenth street, Philadelphia, \$400. Frank Marienella (O and C), 909 Annia street, Philadelphia. Brick, 1 story, 12x14 feet, slag roof, stone foundations.

Rooming House, 2106 Chestnut street, Philadelphia, \$1,500. Girard Trust Co. (O), Broad and Chestnut streets, Philadelphia. Brownsworth & Co. (C), 1611 Sanson street, Philadelphia. Fire escapes.

Warehouse and Stable, Sixth and Willow streets, Philadelphia, \$18,250. Philadelphia Match Sales Co. (O), 411 North Marshall st., Philadelphia. Mitchell Bros. (C), 2125 Race street, Philadelphia. Brick, alterations, etc.

Drying Room, Howard and Norris streets, Philadelphia, \$2,600. James Jenny (O), Howard and Norris streets, Philadelphia. Jacob Bugger (C), 2124 East Cumberland street, Philadelphia. New steam heating system.

Tenement House, 855 North Fortieth street, Philadelphia, \$500. John C. Lonergan (O), 213 Race street, Philadelphia. Woodruff (C), Broad and Race streets, Philadelphia. Alterations.

Dwelling, Twenty-fifth and Seybert streets, Philadelphia, \$400. Coleman Estate (O), Widener Building, Philadelphia. James H. Wilson (C), 1717 Moravian street, Philadelphia. Alterations.

Store and Dwelling, 2742 Kensington avenue, Philadelphia, \$448. John F. Doyle (O), on premises. J. F. Carberry (C), 6227 Limekiln Pike, Philadelphia. Brick work, alterations.

Garage, 246 West Marvine street, Philadelphia, \$750. George C. Bingham (O), on premises. Warren Bros. (C), 1113 Cherry street, Philadelphia. Brick, second story addition, 13x45 feet.

Manufacturing Building, Cambria, west of Eighteenth street, Philadelphia, \$2,000. Linde Air Products Co. (O), Eighteenth and Cambria streets, Philadelphia. W. W. Lindsay & Co. (C), Harrison Building, Philadelphia. Steel frame, 24x14 feet, concrete roof.

Banking House, 6224-26 Woodland avenue, Philadelphia, \$4,000. Logan Trust Co. (O), 1431 Chestnut street, Philadelphia. Smith-Hardiean Co. (C), 1606 Cherry street, Philadelphia. General alterations.

Drug Store, northeast corner of Broad and Germantown avenue, Philadelphia, \$2,000. Louis K. Liggett Co. (O), New York City. Smith-Hardiean Co. (C), 1606 Cherry street, Philadelphia. Consists of general interior alterations.

Store, Springfield avenue and Ruby streets, Philadelphia, \$1,800. F. C. Grives (O), on premises. E. C. Biddle & Co. (C), 5345 South Fifty-third street, Philadelphia. Alterations.

(Continued from page 380)

of suffrage, to the end that this industry may have a clearing house through which interchange of knowledge may be readily effected, and that it may be able to speak for the welfare of the industry as a whole.

The first speaker was W. B. King, of Washington, D. C., counsel for the National Association of Builders' Exchanges, who voiced the sentiment that each industry would best serve the Government if it were organized on a nationwide basis with complete representation of all members of the industry. With this object in view he introduced the following resolution, which was unanimously adopted:

WHEREAS, The national interests demand that the industries of the entire country shall be so organized upon a national basis as to render the greatest possible aid to the Government in the prosecution of the war in the most efficient manner to its earliest possible conclusion, and

WHEREAS, It is of national importance that every industry shall, as far as is consistent with the vigorous prosecution of the war, continue to contribute to the increase of the national wealth, and

WHEREAS, It is desirable in the public interest that at the close of the war there shall be a revival of normal business activity at the earliest possible date, be it

Resolved, That the Chairman be empowered to appoint a committee of eleven on the National Organization of the Building Industry. Said Committee shall prepare an outlined plan for a proposed national organization of the building industry for the primary purpose of placing its resources at the disposition of the Government so as to render the greatest possible aid in prosecuting the war to a successful conclusion, and for the secondary purpose of continuing during the war the production of permanent wealth to the largest extent practicable in view of war needs and of conserving the organization of the building industry in such manner that, upon the return of peace, the industry may be prepared as soon as possible to resume its normal activity.

For effecting these purposes the committee is authorized to confer with officers of the United States Government, to correspond with all constituent members of the building industry, and to act otherwise as may seem best in their discretion.

The committee shall report its plan when drafted for the action of a general conference of the building industry, consisting of those here present and others

interested, to be summoned at an early date, to be fixed by the committee.

Following the adoption of the foregoing resolutions brief addresses were made by Allen Walker, of the United States Chamber of Commerce; W. R. Messenger, Executive Secretary of Building Industries of New York; Rudolph P. Miller, C. A. Fullerton, C. J. Curtin, George S. Bartlett and Franklin T. Miller. Each of these speakers voiced the sentiment that the federation of the building industries was particularly to be desired at this time, and active moral and financial support was promised.

The chairman then announced the following organization committee: F. H. Chapin, of Cleveland, Ohio, vice-president of the Hydraulic Press Brick Com-

pany; A. M. Maddock, Trenton, N. J., president of Thomas Maddock's Sons Company; W. D. Baldwin, Otis Elevator Company, New York City; W. H. Powell, Atlantic Terra Cotta Company, New York City; George F. Lindsey, Minneapolis, Minn., White Pine Bureau; F. T. Miller, F. W. Dodge Company, New York City; B. F. Affleck, Chicago, Ill., president of the Portland Cement Association; Colonel J. R. Wiggins, Philadelphia, Pa., president of the National Association of Builders' Exchanges, and H. H. Murdoch, chairman of the Board of Directors of the Building Industries of New York.

The meeting was adjourned subject to the call of the chairman, and this will depend upon the organization committee. —*Record and Guide*, New York.

ADVISORY BOARD OF BUILDERS COMPILES WAGE RATE SCHEDULE

Time and Half-Time and Working Week Figures Included in Table Prepared Concerning Building Trades

At the June meeting of the Board of Directors of the Master Builders' Exchange the Advisory Board submitted the following schedule of wage rates in the building trades of Philadelphia, which it had compiled:

"The average trade practice for time and half-time," says the report, "applies to overtime in excess of regular eight-hour workday and to Saturday afternoon in a majority of the trades. Double time except in a few trades uniformly applies to Sundays and holidays. Where a single rate is stated, it applies to a majority of that trade operating thereunder. Minimum and maximum rates indicate trades without or partially operating under agreements."

Trade.	—Wages Per Hour—		Working Week.	Overtime.
	Journeymen.	Helpers.		
Bricklayers	80		5 and 5½ days	T. and H. T. and D. T.
Carpenters	70		5½ days	T. and H. T. and D. T.
Cement and asphalt finishers	65		5½ days	T. and H. T. and D. T.
Electricians	55 @75	35@50	5½ days	T. and H. T. and D. T.
Elevators constructors.	78¾	48	5½ days	Double time
Gasfitters	56¼@75	30@50	5½ days	T. and H. T. and D. T.
Hoisting and portable engineers	80		5½ days	T. and H. T. and D. T.
Firemen	50		5½ days	T. and H. T. and D. T.
Ornamental ironworkers	40 @60		5½ days	T. and H. T. and D. T.
Structural ironworkers.	70 @80		5½ days	T. and H. T. and D. T.
Laborers	30 @45		5½ days	T. and H. T. and D. T.
Mason tenders or hod-carriers	50		5½ days	T. and H. T. and D. T.
Lathers	62¼@75		5½ days	T. and H. T. and D. T.
Painters and decorators	60		5½ days	T. and H. T. and D. T.
Plasterers	75	50	5 days	T. and H. T. and D. T.
Plumbers	56¼@75	30@50	5½ days	T. and H. T. and D. T.
Marble cutters.....	62¼@70		5½ days	T. and H. T. and D. T.
Marble setters.....	75		5½ days	T. and H. T. and D. T.
Roofers	50 @62½		5½ days	T. and H. T. and D. T.
Sheet-metal workers...	50 @62½		5½ days	T. and H. T. and D. T.
Sprinkler fitters.....	65¾	37½	5½ days	All double time
Stonemasons	56¼@75	30@50	5½ days	T. and H. T. and D. T.
Terrazzo and mosaic workers	70		5 and 5½ days	T. and H. T. and D. T.
Tile layers and setters.	50		5½ days	T. and H. T. and D. T.
Soft-stone cutters.....	71¾		5½ days	T. and H. T. and D. T.
Granite cutters.....	65		5½ days	T. and H. T. and D. T.
Pipe coverers.....	56¼	25@37½	5½ days	T. and H. T. and D. T.
Wood millworkers.....	35 @50		5½ and 6 days	T. and H. T. and D. T.

Portland Cement, Sand or Gravel by the carload. Consult DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.		Floor Plates.		Refrigerators.	
Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.		Alan Wood Iron and Steel Co., Widener Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.	
Ridpath & Potter Co. Bourse Bldg., Phila.		Furnaces and Ranges.		Henry M. Miller. 46-48-50 N. 2d st., Phila.	
John B. Rulon. 1355 Colwyn st., Phila.		Garage (Portable)		Reinforcing Bars.	
Artists' and Architects' Supplies.		Borden Stove Co. 1311-13 Arch st., Phila.		Truscon Steel Co. Commonwealth Bldg., Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Henry M. Miller. 46-48-50 N. 2d st., Phila.		Roofing.	
Warren-Knight Co. 136 N. 12th st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		The Barrett Co. New York City and Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Granite.		Roofing Tile.	
Blue Prints.		Service Equipment Co. Bourse Bldg., Phila.		O. W. Ketcham. Builders' Exchange, Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Hauling Contractors.		Scales.	
F. Weber & Co. 1125 Chestnut st., Phila.		Holmesburg Granite Co., Commercial Trust Bldg., Phila.		The Fairbanks Co. 7th and Arch sts., Phila.	
Blue Print Paper.		Heating Contractors.		Sewer Pipe and Flue Linings.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Barber Contracting Co., 1127 Land Title Bldg., Phila.		C. F. Shellenberger. Builders' Exchange, Phila.	
Brick (Face, Etc.).		Heating Boilers.		Sewage Disposal.	
O. W. Ketcham. Builders' Exchange, Phila.		Borden Stove Co. 1311-1313 Arch st., Phila.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Brick Renovating.		Fleck Bros. Co. 44 N. 5th st., Phila.		Soundings.	
Adolph Christensen. 1433 Brown st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Builders.		Insurance.		Ridpath & Potter Co. Bourse Bldg., Phila.	
Hogg Construction Co., Inc., 1634 Sansom st., Phila.		Harris J. Latta. Penna. Bldg., Phila.		John B. Rulon. 1355 Colwyn st., Phila.	
Mitchell Bros. 2125 Race st., Phila.		Insurance Co. of North America, 3rd and Walnut sts., Phila.		Sprinklers.	
Pomeroy Const. Co. 1609 Ransstead st., Phila.		Lighting Fixtures.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Builders' Supplies.		Staman & Dickey. 30 S. 16th st., Phila.		Surety Bonds.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Lumber.		Harris J. Latta. Penna. Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.		Terra Cotta (Architectural).	
Builders' Equipment.		Marble Mosaic.		O. W. Ketcham. Builders' Exchange, Phila.	
Service Equipment Co. Bourse Bldg., Phila.		Belf Bros. & Co. 1923 Market st., Phila.		Test Borings.	
Cement.		Italian Marble Mosaic Co. 433 Spruce st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Metal Lath.		Ridpath & Potter Co. Bourse Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		General Fireproofing Co., Pennsylvania Bldg., Phila.		John B. Rulon. 1355 Colwyn st., Phila.	
Lehigh Portland Cement Co., Finance Bldg., Phila.		Pearce Fireproof Co. 1345 Arch st., Phila.		Tile and Terrazza Work.	
Columns (Metal).		Truscon Steel Co. Commonwealth Bldg., Phila.		Belf Bros. & Co. 1923 Market st., Phila.	
Pearce Fireproof Co. 1345 Arch st., Phila.		Meters.		Italian Marble Mosaic Co. 433 Spruce st., Phila.	
Composition Flooring.		Philadelphia Meter Co., Real Estate Trust Bldg., Phila.		Ventilators.	
The Barrett Company, New York and Philadelphia.		MHI Supplies.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Philadelphia Mineral Flooring Co., 5632 Summer st., Phila.		Paints and Varnishes.		Wall Board.	
Woodoleum Manufacturing Co., 203 Liberty Bldg., Phila.		The Barrett Company, New York and Philadelphia.		Cell Board.	
Dampproofing.		Felton, Sibley & Co. 136 N. 4th st., Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.	
The Barrett Co. New York City and Phila.		Pipe Fittings and Valves.		Water Paint.	
Drawing Materials.		Plumbing Fixtures.		Wm. B. Southern, N. W. Cor. 12th and Spruce sts., Phila.	
Charles H. Robbins. 125 S. 11th st., Phila.		Fleck Bros. Co. 44 N. 5th st., Phila.		Waterproofing.	
F. Weber & Co. 1125 Chestnut st., Phila.		James A. Vogel Co. Wilmington, Del.		The Barrett Co. New York City and Phila.	
Electrical Construction.		Keystone Supply & Mfg. Co. 913 N. 9th st., Phila.		Water Supply.	
Baird-Osterhout Construction Co., 1620 Chancellor st., Phila.		Preservatives (Wood and Concrete).		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Elevators.		Ranges.		Weather Strip (Metal).	
A. B. See Electric Elevator Co., Colonial Trust Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Diamond Flexible Metal Weather Strip Co., Geo. R. C. Johnston. Drexel Bldg., Phila.	
Engineers' Supplies.		Henry M. Miller. 46-48-50 N. 2d st., Phila.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
Charles H. Robbins. 125 S. 11th st., Phila.		Richardson & Boynton Co. 1332 Arch st., Phila.		Window Screens.	
Warren-Knight Co. 136 N. 12th st., Phila.		Refrigerators.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Reinforcing Bars.		Wire Work.	
Fences.		Roofing.		Audubon Wire Cloth Co., Inc. Audubon, N. J.	
Anchor Post Iron Works, Real Estate Trust Bldg., Phila.		Roofing Tile.			
Fire Doors.		Scales.			
Merchant & Evans Co., 2035 Washington ave., Phila.		Sewer Pipe and Flue Linings.			
Fireproofing.		Sewage Disposal.			
General Fireproofing Co., Pennsylvania Bldg., Phila.		Soundings.			
Henry S. Harris. Land Title Bldg., Phila.		Sprinklers.			
Pearce Fireproof Co. 1345 Arch st., Phila.		Surety Bonds.			
Truscon Steel Co. Commonwealth Bldg., Phila.		Terra Cotta (Architectural).			

1792

1918

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PHILADELPHIA



126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance
Tornado
Sprinkler
Explosion
Inland Transit
Salesman's Floater

Automobile
Use and Occupancy
Builder's Risk
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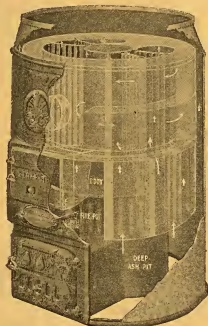
Builders' Guide

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Vol. XXXIII., No. 27
July 3, 1918

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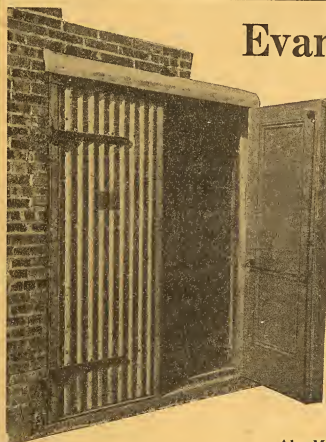
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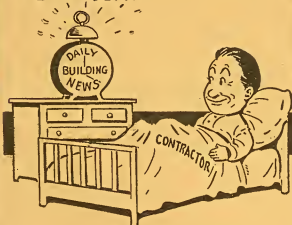
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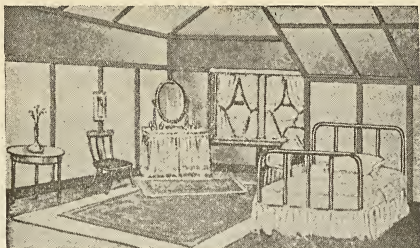
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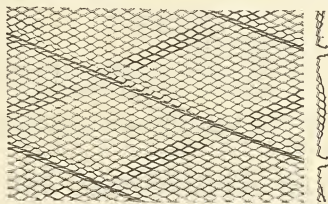
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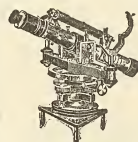
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
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PHILADELPHIA
July 8, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

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As The Editor Sees It



IT is evident that Philadelphia needs a cleaning up in more respects than one, and the Government is now stepping in in the role of "house cleaner." Now that there are so many houses in demand for workers every possible habitation must and will be made use of.

According to John Ihlder, secretary of the Philadelphia Housing Association, unsanitary housing conditions in the poorer districts of this city are abnormal and worse than those in other cities. Mr. Ihlder estimates that we need now 10,000 more houses in the city limits.

The Philadelphia Housing Association is investigating the houses in the southern section of the city, with the intention of repairing them, but, says Mr. Ihlder, "the houses have fallen into an impossible condition. There is an imperative need now to enforce every one of our sanitary and housing laws."

Perhaps if the Government thus takes charge, sees that our laws are enforced, and presents to us a clean and sanitary city, we shall like the new order of things so well that we shall be able thereafter, to attend to our own law-enforcing and our own house cleaning. If so, we can see one benefit which Philadelphia will have derived from the war.

* * *

THE Department of Labor has announced the architects, engineers and town planning experts for each of the housing developments undertaken by the Government under the act recently

passed by Congress appropriating \$60,000 for the construction or lease of quarters for war workers.

The architect, town planner and engineer, respectively, for the various projects are:

Philadelphia Navy Yard—Rankin, Kellogg & Crane, Philadelphia; no other appointments made.

Erie, Pa.—Albert H. Spahr, Pittsburgh; C. D. Lay, New York; Chester & Fleming, Pittsburgh.

South Charleston, W. Va.—Godley, Haskell & Sedgwick, New York; James L. Greenleaf, New York; James L. Greenleaf.

Bethlehem, Pa.—Zantzinger, Borie & Medary, Philadelphia; T. W. Sears, Philadelphia; L. J. H. Grossart, Bethlehem.

Bath, Me.—Parker, Thomas & Rice, Boston; Lorrington Underwood, Boston; Weston & Sampson, Boston.

Quincy, Mass.—J. E. McLaughlin, Boston; H. J. Kellaway, Boston; Ernest W. Branch, Quincy.

Bridgeport, Conn.—R. C. Sturgis, Boston; A. A. Shurtleff, Boston; no engineer appointed.

Puget Sound, Wash. (Bremerton)—A. H. Albertson, Seattle; E. T. Mische, Portland, Ore.; Sawyer Bros., Spokane; George B. Sawyer, Seattle, Wash.

Watertown, N. Y.—Davis, McGrath & Kiessling, New York; F. Vitale, New York; E. W. Sales, Watertown.

IN these days of stern reality, the practical idealism revealed in one solution of the housing problem offered by an Italian association is most refreshing:

"The Good Dwellings Society of Rome has erected a block of flats for workmen containing 800 dwellings suitable for all sizes of families.

"One enters the quadrangle by a great gateway. To the left is a room for storing baby carriages and bicycles. To the right is the porter's office, the post-office and telephones for general use. Inside, nearest the gate, are flower beds and an open space for the pleasure of every one. Beyond are the children's gardens, then a little low building called the children's house, a charming place, white, with great windows that stand open to the air, and covered with rambler roses. Here is the nursery school for children under seven. Another big room in the Children's House is the 'after school,' where the children over seven do their home lessons on returning from school, under supervision and in conditions that they could not possibly find in their own homes.

"The 'after school,' the nursery school, and the cloak rooms occupy the whole front of the children's house. On the other side there is a large common room for the women fitted up with electric sewing machines and electric irons, which can be used on payment of a small sum. Here also are great cutting tables and sewing tables, such as women know to be invaluable in sewing work, but which

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are impossible in small homes. A common wash house and laundry is in the basement of the building.

"This central building also contains a surgery, where a doctor is in attendance at stated times and any tenant may have free advice. If tenants need attention at their own apartments, there is a fee of 20 cents. Twice a week the doctor examines all the school children.

"The buildings are equipped with nu-

merous bath rooms, but hot water is obtainable only at stated times.

"The flats are of various sizes. Overcrowding is forbidden, and families must move into larger flats as their numbers increase. The largest flats are designed to accommodate the parents and five children. Tenants who raise above a certain standard in the care of their dwelling receive a percentage of their rent back in an annual bonus."—*Realty*.

THE EVOLUTION OF A BUNGALOW.

A few years ago Edwin F. Brown, a Chicago banker, set about the task of designing for himself a houseboat. As the plans of his boat developed he worked out many novel features to be included in its construction. The real inspiration, however, came one day when Mr. Brown was taking a spin along the shore of Lake Michigan in his high-powered motor car. He was just as fond of motoring as he was of houseboating, and it seemed a pity that the pleasures of the two recreations could not be combined. Then the thought occurred to him that he might make a place on his boat for the car.

Mr. Brown admitted to himself that the scheme was a likely one—but couldn't it be improved upon? Certainly. He would make the motor car earn its passage by furnishing the power to propel the boat. And so was born this unique combination of land vehicle and water craft; a web-footed roadster or a pneumatic-tired river packet, whichever one preferred to call it. Mr. Brown himself called it simply "Driftwood," for that was the name he gave his boat.

A few months later residents along the north shore of Lake Michigan in the vicinity of Chicago were startled by the appearance of a palatial houseboat which moved up and down the lake at a speed entirely inconsistent with all traditions for this particular kind of vessel. There was not a sign of smoke nor any sound which indicated the presence of an engine aboard, and yet the two paddlewheels on the side of the boat were churning up the water as the craft proceeded on its course. The mystery remained unsolved until, a little later, Mr. Brown ran his boat to shore, when it was seen that on the aft deck, between the paddlewheels, reposed an automobile and that the engine of the car was chugging merrily away.

The mechanical arrangements by which Mr. Brown transformed his automobile in less than ten minutes into a marine engine were simple enough. He first ran the car aboard the boat over a gangplank which connected with the lone overhanging aft deck. It was then guided along a couple of grooved runways, running from end to end of the deck, and brought to a stop between the two eight-foot paddlewheels. The rear axle of the car was then jacked up so as to lift the tires clear of the deck, and finally connection was made by

means of link-chain belts between spurred sprocket wheels attached to the rear hubs of the car and similar but larger sprocket wheels which were keyed to the ends of the paddle-wheel shafts.

The paddlewheels were constructed so as to be independent of each other. When connected with the automobile the emergency brake of the car was disconnected from one driving wheel and the foot brake from the other. By this ingenious device one of the paddlewheels could be revolved while its opposite remained stationary, or both could be turned at the same time. This arrangement made it possible to steer the boat without recourse to the rudders—of which there were two, each six feet long and two and a half feet wide—since if the port paddle was revolved while the starboard was held still, the bow of the houseboat was shoved around to starboard, and vice versa. In addition to its two rudders the boat also had a couple of drift-boards, each ten feet long and three feet wide, to counteract the tendency of a flat-bottomed boat to drift sidewise.

Not only was the "Driftwood" remarkable in its mechanical arrangements, but as an example of marine architecture, both inside and out, it was unsurpassed. There was practically every convenience that is afforded by a modern steam-heated, six-room apartment. All of the rooms were equipped with radiators, placed in out-of-the-way spots, the heating plant being located in the kitchen. This plant also supplied hot water for the bathroom, which was a model of its kind, with porcelain tub, tile floor, nickel trimmings and shower bath. The boat carried a gas-making machine, which supplied gas for illumination and cooking, and a water filtering system which could completely clarify the water of the muddiest stream, making it suitable for lavatory and kitchen purposes, while a water-still rendered it drinkable.

The kitchen had a back porch, where were found a refrigerator, a laundry, clothes dryer and other conveniences. Next to the bathroom were four sleeping rooms, all of a good size, and then came a large combined living and dining room, while the spacious forward deck was fitted up in the style of a screened summer porch. The entire top of the house proper, which was fifty feet long and sixteen feet wide, was converted into a roof garden,

with swinging seats, chairs, tables and potted plants. The roof garden was covered by an awning, which could be folded flat to permit the boat to pass under low bridges.

The "Driftwood" measured seventy-five feet over all, with a width of sixteen feet five inches. Its owner made an exhaustive examination of the size of canal locks all over the United States before deciding upon these dimensions, as he wanted a boat which would pass through any canal in the country. The entire weight of the boat was thirty-six tons, and it drew sixteen inches of water. The hull was constructed of tank pine and Oregon fir, and a novel system of ventilation which kept a current of air constantly passing through it prevented even a suspicion of dampness.

To conform with the name of the boat, "Driftwood," a scheme of color decoration, including French grays, water green and river browns, was adopted and used in connection with the wall tints, the window glass, gas fixtures, rugs, curtains, hangings and furniture.

The owner of the "Driftwood" put his scheme, and incidentally the practicability of the houseboat for living purposes, to a thorough test. Day after day, throughout the summer and fall, he and his family cruised over lakes and streams and through canals, stopping wherever the banks looked attractive. Many a time they moored at a convenient spot, ran the car ashore and toured the environs, feeling like discoverers. Occasionally they spent several days in one place. When they tired of automobilizing they returned "home" and continued their water journey.

Then came a day when Mr. Brown's daughter was to be married, and the houseboat, having cost something over \$25,000, together with its furnishings, seemed an acceptable wedding gift, as well as a delightful place on which the young couple might spend their honeymoon trip. So satisfactory, indeed, did this arrangement turn out, that Mr. Brown's daughter decided she would like to spend the entire winter on the "Driftwood." Accordingly the boat was pulled on the lawn of the Brown home, and after all necessary light and other service connections had been made, it proved, even in the severest weather, just as comfortable and convenient as any of the neighboring residences.

Finally there came a time when it was decided that the "Driftwood's" days as a water craft were ended and that it should be turned into a regular and permanent bungalow of concrete. This bungalow still retains all the outlines of the original craft, even to the paddle-wheel boxes at the rear and the curves of the prow and stern, the only substantial changes being the transformation of the forward deck into a sun parlor and the roof garden into a second story, and the addition of an entrance porch. The result is a structure which is at once convenient and artistic, and one whose counterpart probably does not exist.—Robert H. Moulton, in "Architectural Record."

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Elevated Stations (2), Cont. Nos. 537 and 538, Frankford Elevated. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Brick, reinforced concrete, stone and terra cotta, 2 stories, tile and slag roofs, cement floors, hollow tile, tile, marble and terrazzo work, rolled steel sash and skylights, hollow metal sash and doors, fire doors, iron stairs, cement floors, safety treads, roof ventilators, metal ceilings, wire work, ornamental iron work (electric work and plumbing separate bids). Revised plans in progress. Owners will take new bids in about two weeks.

Roof and Skylight Repairs, City Hall, Philadelphia, \$10,000. Architect, Joseph A. Rolletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, 113 City Hall. Consists of general repairs to City Hall roof and skylights. Plans completed. Owners will advertise for bids soon.

Buildings (alts.), Nos. 2, 3, 5, 5A and 10, Job No. 62, Schuylkill Arsenal. Architect, private plans. Owners, U. S. Government, care of C. E. Boller, Schuylkill Arsenal. Terra cotta fireproofing, fire doors, rolled steel sash, cement floors, hollow tile, metal lath, wire work. The following were the only bids submitted: Chas. Gilpin, Harrison Building, \$19,483, 60 days; Wills-Ludwick Co., 34 South Seventeenth street, \$21,140, 90 days; Lam Building Co., 1001 Wood street, \$21,480, time June 29 to September 7th.

Dispensary and Administration Buildings, Seventh street, between Delancy and Cypress streets, Philadelphia. Architects, Durning, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babies' Hospital of Philadelphia, care of Mr. Davidson, 1713 Walnut st. Fireproof brick and granite, steel and reinforced concrete, 6 stories and basement, 40x81 feet, slate and cement roof, stone foundations, steam heating, electric lighting, tile and marble work, rolled steel sash, fireproof floors, cement and composition floors, metal lath, elevators, metal window guards, waterproofing (heating, plumbing, sterilizers, refrigerators, incinerators, ranges, kitchen cabinets, electric wiring and electric elevator reserved). Architects taking bids, due July 10th. P. L. Hoover & Son, 1023 Cherry st.; R. C. Ballinger & Co., 218 N. Thirteenth st.; Ketcham & McQuade, 1029 Brown st.; Wm. R. Dougherty, 1610 Sansom street; Mitchell Bros., 2125 Race street; P. B. Davis, 240 N. Sixteenth street; A. L. Pretz & Son, Heed Building; Milton W. Young, Overbrook, Pa., and Robert E. Lamb Co., 843 North Nineteenth street, are figuring.

Residences (4), Frankford, Philadelphia. Architect, Samuel D. Milner, 1117 Foulred street, Frankford. Owner, George Rimer, 4842 Hawthorne street, Frankford, Philadelphia. Hollow tile and stucco, 2½ stories, shingle roof, hot water heating, electric lighting. Owner is taking sub-bids.

Stable (alts.) to Garage, 4806 Wayne avenue, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Angelo Pasquarello, on premises. Stone and brick, 1 story, changing stable, 60x60 feet, to garage, 60x120 feet, slag roof, cement floors, electric lighting, hollow metal skylights, roof ventilators, gasoline storage system. Plans completed. Owner will take sub-bids in one week.

Residences (800), Twenty-sixth to Twenty-ninth streets, McKean street, Philadelphia. Owners, U. S. Government, Department of Labor, Washington, D. C. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Brick, 2 stories, various sizes. Plans in progress.

Hospital (alts.), 534 Spruce street, Philadelphia. Architect, Le Roy B. Rithschild, Bulletin Building, Philadelphia. Owners, Jewish Maternity Hospital, on premises. Consists of general alterations. Plans in progress. Too early for details.

Chapel (alts.), Eighteenth and Morris sts., Philadelphia. Architect, E. F. Durang, 1220 Locust street, Philadelphia. Owners, St. Thomas' R. C. Church, care of Rev. Francis J. Sheeha, on premises. Repointing wall, exterior painting and new roof. Architect has received bids.

Rebuilding Outside Walls, northeast corner of York Road and Callowhill street. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owner, John F. Betz, 3rd, care of agents, Continental Title and Trust Co., Twelfth above Chestnut streets, Philadelphia. Brick, plastering, painting, metal lath. Architect taking bids, due as soon as possible. A. L. Pretz & Son, Heed Building; John McShain, 1610 North street; Raith Const. Co., 304 Master street; Geo. Mink, 2207 Chestnut street; E. J. Kreitzburg, 1345 Arch street, and Matthew King, Commercial Trust Building, are figuring.

Factory, Ruth and Somerset streets, Philadelphia. Architects, Wm. Steele & Sons Co., Inc., Sixteenth and Parkway, Philadelphia. Owners, Orinoka Mills, on premises. Brick and mill construction and reinforced concrete and brick, 1 and 6 stories, 70x80 feet and 10x24 feet, Johns-Manville roof, steam heating, electric lighting, rolled steel sash, fire doors, cement floors, metal lath, roof ventilators, waterproofing. Wm. Steele & Sons, Inc., taking sub-bids.

Extension to Aircraft Factory Transformer House, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Dewitt C. Webb, Public Works, Navy Yard. Brick and steel, 1 story, 30x52 feet, slag roof, concrete floors, roof ventilators. Lowest bids submitted by Thos. Reilly, 1616 Thompson street, \$9,642, 75 days; W. O. Springer, 1624 Letimer street, \$10,974, 105 days.

Stable (alts.) to Garage, Franklin and Girard avenue, Philadelphia. Architect, private plans. Owner, Dr. Abraham Silverman,

1511 West Girard avenue, Philadelphia. General alterations, cement work, electric lighting. Owner will take sub-bids.

Gun Drill Room, Spec. 3067, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Bureau of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 2 stories, 100x100 feet, and 1 story, 14x15 feet, ready roof, concrete foundations, steam heat, electric light, rolled steel sash, roof ventilators, concrete floors. Lowest bid submitted by Feth H. Linthome, Baltimore, Md.

Grading and Laying Tracks, Belmont Branch, between Girard and Montgomery avenues. Architect, private plans. Owners, Philadelphia Terminal Division, W. G. Shaner, supervisor, 3200 Powelton avenue, Philadelphia. Owners taking bids, due July 8th. A. L. Carhart, Penfield Building; James McGraw Co., M. J. McMenamin, L. F. Sims, and Ajax Curtis, Inc., Commercial Trust Building; Keystone State Const. Co., Franklin Bank Building; John Goll & Co., 1539 Filbert street; T. F. Golden, 2729 North Tenth street; Curtis Bros., Torresdale avenue and Magee street, Philadelphia, and Whiting Turner Const. Co., Sexton Building, Baltimore, Md., are figuring.

Rooming House (int. alts.), Eighteenth and Ridge avenue, Philadelphia. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Bridge Avenue Farmers' Association, on premises. Brick, 4 stories, 46x56 feet, tile work, plumbing, electric lighting and fixtures, brick fire tower, cement work, new partitions and general interior repairs. Architect taking bids, due July 5th at 5 P. M. Hogg Const. Co., 1634 Sanson street; E. E. Hollenback, Inc., 1804 Bradywine street; P. Haibach Const. Co., Twenty-sixth and Thompson streets; F. A. Havens & Co., 845 North Nineteenth street, and George M. Evans, 45 North Thirteenth street, are figuring.

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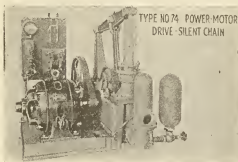
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Pennsylvania Building

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Warehouse, Fourth and Green streets, Philadelphia. Architect, private plans. Owner, A. H. Ladner, Inc., Fifth and Green streets, Philadelphia. Lessees, Harold McCalla Co., 444 Fairmount avenue, Philadelphia. Brick, 1 story, 60x180 feet, slag roof, concrete floors (heating and lighting reserved). Contract awarded to F. B. Davis, 240 North Sixteenth street, Philadelphia.

Manufacturing Buildings (2), Margaret and Bermuda streets, \$75,000. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Brick and concrete, 1 story, 193x 64 feet and 124x69 feet, Barrett roof, cement floors, electric lighting, rolled steel sash. Contract awarded to A. R. Raff Cont. Co., 1635 Thompson street.

Dwelling (alts.), 221 South Eighteenth st., Philadelphia, \$5,000. Architect, Horace Trumbauer, Land Title Building, Philadelphia. Owner, E. T. Stotesbury, Drexel Building, Philadelphia. Changing partitions, new porch, new toilets, tile work. Contract awarded to Geo. F. Payne & Co., 401 South Juniper street, Philadelphia.

Office Building, Forty-ninth and Botanic avenue, Philadelphia, \$30,000. Architect, private plans. Owners, Geo. W. Smith & Co., on premises. Brick and concrete, 1 story, 107x 107 feet, slag roof, cement floors, rolled steel sash. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Manufacturing Building, Pennypacker Creek, east of Frankford avenue, \$12,000. Architect, private plans. Owners, Summerdale Dyeing Print and Tin Works, Inc., Mill and Race streets, Philadelphia. Brick, 2 stories, 59x88 feet, slag roof, cement foundations. Con-

tract awarded to Joseph A. Hand, 8029 Frankford avenue.

Store and Dwelling (alts. and add.), 740 South street, \$4,000. Architect, private plans. Owner, S. Dubrow, 740 South street, Philadelphia. Brick, 2 stories, 12x27 feet, slag roof. Contract awarded to J. Gorehov, 4116 Girard avenue, Philadelphia.

Lumber Sheds, Wheatstheaf Lane and Sepviva street, \$3,000. Architect, private plans. Owners, American Engineering Co., Aramingo and East Cumberland street. Frame, 1 story, 24x90 feet and 27x90 feet, slag roof. Contract awarded to Philip Halback Cont. Co., Twenty-sixth and Thompson streets.

Sea Wall, Spec. 6502, Delaware River, Frankford Arsenal. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Piling and concrete work, 15 feet high, 600 feet long. Contract awarded to Wills-Ludwick Co., 34 South Seventeenth street, Philadelphia.

Theatre, Twelfth and Morris streets, Philadelphia, \$2,000. Architect, private plans. Owners, Allambra Theatre Co., Twelfth and Morris streets. Interior alterations. Contract awarded to Ketcham & McQuade, 1029 Brown street, Philadelphia.

Library, Fifty-first and Chester avenue, Philadelphia, \$100,000. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, Free Library of Philadelphia, Thirtieth and Locust streets, Philadelphia, are the John Ashhurst, Librarian. Brick, steel, terra cotta and limestone, 1 story and basement, 94x39 feet and 39x46 feet, slate, slag and tin roof, stone foundations, tile and marble work, metal lath, galvanized iron skylights, ornamental iron work, roof ventilators,

waterproofing (heating and electrical work reserved). Contract awarded to Frank G. Stewart, 1619 Sansom street, Philadelphia.

Tank Tower, Tenth and Lombard streets, Philadelphia, \$2,000. Architect, private plans. Owners, Williams & Marcus Co., 221 South Darien street, Philadelphia. Brick work, wood tank, 10,000 gallons capacity, for sprinkling system. Contract awarded to Wark-Yardley Co., 1737 Filbert street.

Garage, Thirteenth street, near Oak Lane avenue, Philadelphia, \$4,000. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, C. E. Doan, Sedgwick, Pa. Stone, 2 stories, 26x25 feet, shingle roof, stone foundations, hot water heating, electric lighting, cement and yellow pine floors. Contract awarded to Nardy Co., Bulletin Building, Philadelphia.

Garage, 3110 West Penn street, \$750. Architect, Samuel D. Hawley, Queen Lane Manor, Philadelphia. Owner, F. Kimball Hager, 3110 West Penn street, Queen Lane Manor. Brick and stucco, 1 story, 12x19 feet, slate roof, cement floors, electric lighting (heating reserved), stone foundations. Contract awarded to Fred Elvidge & Son, 5522 Germantown avenue.

Restaurant, 12 South Twelfth street, \$6,200. Architect, private plans. Owners, Wm. Penn Charter School, 8 South Twelfth street, Philadelphia. Brick, 2 stories, 26x26 feet, slag roof, hot water heating, electric lighting, pine floors. Contract awarded to Stacy Reeves & Son, 2011 Market street.

Restaurant and Office, 204 South Tenth st., Philadelphia, \$9,500. Architect, private plans. Owners, Horn & Hardart Baking Co., 204 S. Tenth street, Philadelphia. Brick, 4 stories, 17x38 feet, slag roof. Contract awarded to Harry R. Rust, 724 Ludlow street, Philadelphia.

Garage, Tioga and Brabant streets, Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, Dill & Collins, on premises. Reinforced concrete, brick and steel, 1 story, slag roof, rolled steel sash, roof ventilators. Contract

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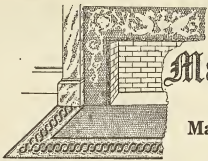
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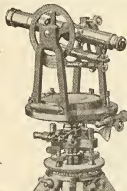
(At top) Modern Brotherhood of America Bldg., Mason City, Iowa. Roofs, Mica Insulating Co., Mason City, Archs., Bell & Benton, Minneapolis, Cont., W. S. Kingsley, Fairbairn, Minn. (Below) Church of Christ, Mason City, Ia., Roofs, Mica Insulating Co., Mason City, Archs., Geo. W. Kramer & Son, New York City, Conts., Wm. O'Neil & Son, Fairbairn, Minn. (In oval) Mason City High School, Ia., Roofs, Mica Insulating Co., Mason City, Archs., J. H. Felt & Co., Mason City, Cont., H. F. Jones, Mason City. (Bottom of left) Marble-C-Smith Bldg., Mason City, Iowa. Roofs, Mica Insulating Co., Mason City, Archs., E. Broden, Mason City, Conts., P. R. Wells & Son, Mason City. (Bottom in center) Jefferson School, Mason City, Iowa. Roofs, Mica Insulating Co., Mason City, Archs., E. R. Bogardus, Mason City, Conts., Henkle & Brown, Mason City. (Bottom at right) Y. W. C. A. Bldg., Mason City, Ia., Roofs, Mica Insulating Co., Mason City, Archs., Shattuck & Tussey, Chicago, Ill. Cont., B. L. Sirett, Mason City.





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Store Front, Eighteenth and Ridge avenue, Philadelphia, \$900. Architect, George S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Ridge Avenue Farmers' Association, on premises. New store front. Contract awarded to F. A. Havens Co., 845 North Nineteenth street, Philadelphia.

Residence (alts. and add.), 1796 South Broad street, Philadelphia, \$1,000. Architect, private plans. Owners, Augustine Social and Beneficial Society, care of Lewis Polstring, Eleventh and Fitzwater streets, Philadelphia. Brick, rear addition, 2 stories, 18x12 feet, slag roof and interior alterations. Contract

awarded to A. Donaldson, 2236 Oakford street, Philadelphia.

Church, 2411-13 North Alder street, Philadelphia, \$4,000. Architect, private plans. Owners, Bright Hope Baptist Church, on premises. Brick, 1 story, 28x29 feet, slag roof, stone foundations, electric lighting. Contract awarded to J. F. Trent, 2041 Master street, Philadelphia.

Dwellings (6), Union street, north of Fountain street, Manayunk, \$19,800. Architect, private plans. Owners, Philadelphia Paper Manufacturing Co., Manayunk, Philadelphia. Brick, 2 stories, 16x29 feet, slag roof, hot air heating. Contract awarded to Barclay White Co., 1713 Sansom street.

PENNSYLVANIA Construction News

Hotel Building, near Sun Shipbuilding Plant, Chester, Pa. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Greenstein, Chester, Pa. Brick and structural steel, 3 stories, 80x80 feet (will contain 150 rooms and cafe), stone foundations, concrete footings, slag roof, yellow pine and reinforced concrete floors, cement work, hot water heating, electric lighting, tile and marble work, rolled steel ssab, fire doors, reinforced concrete fire tower, metal lath, safety treads, damp-proofing, ornamental iron work. Owner is taking bids due as soon as possible. Jacob Bender, 1817 South Fourth street, Philadelphia, is figuring.

Residences (12), Chester, Pa. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Greenstein, Chester, Pa. Brick, 2 stories, 16x30 feet, stone foundations, slag roof, hot air heating, electric lighting, yellow pine floors. Owner is taking bids. Jacob Bender, 1817 South Fourth street, Philadelphia, is figuring.

Store and Apartments, 5 Points, South Bethlehem, Pa., \$9,000. Architect, Robert E. Ochs, City Realty Building, Bethlehem,

Pa. Owner, name withheld. Brick and iron work, 3 stories, 33x20 feet, slate and slag roof, steam heating, electric lighting, hollow tile, kalamein doors. Plans completed. Architect ready for bids.

Store Front, 431 East Third street, South Bethlehem, Pa., \$2,000. Architect, E. H. Bitting, Wilber Trust Building, South Bethlehem, Pa. Owner, Jos. Friedman, 431 East Third street, South Bethlehem, Pa. New front, 2 stories, plate glass, electric lighting, hardwood floors. Plans in progress. Owner will take bids in one week.

Bank (alts.), Bethlehem, Pa., \$6,000. Architect, H. T. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, Lehigh Valley National Bank, care of F. P. Snyder, Bethlehem, Pa. Interior alterations, 1 story, tile work, hardwood floors, plumbing. Plans in progress. Owners will take bids in a week. C. F. Swartz, Spect Bros., and Geo. Nerdinger, all of South Bethlehem, will figure.

Hospital (add.) Northampton, Pa., \$2,500. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owner, Dr. C. A. Hafl, Northampton, Pa. Frame, 1

story and basement, 26x25 feet, composition roof, steam heating, electric lighting, hardwood floors. Architect and owner taking bids. Shaffer & Loudenslager, Allentown, Pa.; Allen H. Leivenberger, Fullerton, Pa., and Frank Goldsmith, Pensauken, Pa., are figuring.

Bridge, Lynnport, Pa. Engineer, Tilghman Moyer, 824 Hamilton street, Allentown, Pa. Owner, Lehigh County Commissioners, care of H. G. Weinert, Clerk, Court House, Allentown, Pa. Reinforced concrete & steel, 95 feet long. Plans completed. Owners will advertise for bids in one week.

Schools (2), Lester and Essington, Pa. Architect, Cyde S. Adams, 1509 Arch street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick and stone, 2 stories, 85x102 feet. Architect taking bids, due July 8th. The following is the revised list of bidders: Stacy Reeves & Son, 2011 Market street; Wark-Yardley Co., 1737 Filbert street; John R. Wiggins & Co., Otis Building, Philadelphia; Flounders Bros., Media, Pa., and Geo. W. Shaner & Son, Palmyra, N. J.

Restaurant (add.), Ninth and Simpson sts., Eddystone, Pa., \$30,000. Architect, private plans. Owners, Hassis Bros., on premises. Brick, 2 stories, slag roof, steam heating, electric lighting. Owners ready for bids.

Residences (1,000), Bethlehem, Pa. Architects, Zantzing, Borie & Medary, Otis Building, Philadelphia. Owners, U. S. Government, Department of Labor, Washington, D. C. Brick, 2 stories, various sizes, slate roof, hot air or steam heating. Plans completed. Owners will take bids and buy materials.

Store and Apartment (alts. and add.), 348 Penn street, Reading, Pa. Architect, Wayne M. High, 11 North Fifth street, Reading, Pa. Owner, D. P. Schaeffer, on premises. Brick, 3 stories, composition and tin roof, hot water heating, electric lighting, tile floor, metal lath, hollow metal skylights, copper bay window. Architect ready for bids.

Church and Sunday School, Bethlehem, Pa. Architect, A. A. Ritcher, 31 North Sixth street, Reading, Pa. Owner, Calvary Reformed Congregation, care of Rev. T. C. Strock, Bethlehem, Pa. Brick, 1 story, steam heating, electric lighting, slate roof, hardwood floors, stained glass. Plans about to be started. Too early for details.

Store (alts.), Fifth and Penn streets,

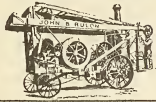
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Reading, Pa., \$15,000. Architect, E. Z. Scholl, 31 North Sixth street, Reading, Pa. Owner, Schwartz Bros., Reading, Pa. Brick, new front, 3 stories, steam heating, electric lighting. Plans in progress. Architect will soon take bids.

Theatre (rebuilding), Eighth and Penn streets, Reading, Pa., \$70,000. Architect, Hoffman Co., Finance Building, Philadelphia. Owners, Berks Amusement Co., care of Wilmer & Vincent, Commercial Trust Building, 1451 Broadway, New York City. Brick, 2 stories. Plans in progress. Too early for details.

Office Building, Marcus Hook, Pa. Architect, W. A. Courtenay, Jr., Marcus Hook, Pa. Owners, Sun Company, Marcus Hook, Pa. Brick, steel and fireproof terra cotta, 2 stories, 81x65 feet, slag roof, cement floors, steam heating, electric lighting, terrazzo work, rolled steel sash and skylights, metal doors, metal lath, safety treads, roof ventilators, metal window guards, waterproofing and dampproofing. Owners taking bids, due July 5th. Pomerooy Const. Co., 1609 Ranstead street, is figuring.

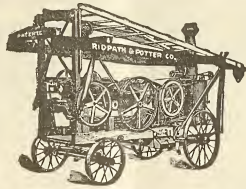
Pennsylvania Contracts Awarded

Garage, Bethlehem, Pa., \$2,500. Architect, Robt. E. Ochs, City Realty Building, Bethlehem. Owner, name withheld. Brick, 22x39 feet, slate roof, electric lighting. Contract awarded to M. K. Hoffman, Bethlehem, Pa.

Garage, Bethlehem, Pa., \$2,000. Architect, Robert E. Ochs, City Realty Building, Bethlehem, Pa. Owner, name withheld. Frame and shingle, 1 story, 22x22 feet, cement floor, electric light. Contract awarded to M. K. Hoffman, Bethlehem, Pa.

Store Building, West Fourth street, South Bethlehem, Pa., \$10,000. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Brick and metal store front, 1 story, 40x80 feet, composition roof, hot air heat, electric light, tile work, hollow metal sash, composition floors, hollow tile. Contract for foundations awarded to Earl Garber, 917 Delaware avenue, South Bethlehem, Pa.

Residence, Mineral Spring road, Reading, Pa., \$50,000. Architect, A. A. Ritcher, 31 North Sixth street, Reading, Pa. Owner, Max Lauria, Reading, Pa. Hollow tile and stucco, 2½ stories, 60x64 feet, tile roof, vapor heating, electric lighting, tile and marble work, hollow tile, gasoline storage system, hardwood floors. Contract awarded to Geo. A. Koch, Reading, Pa.



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NEW JERSEY

Construction News

Residences and Garages (3), Atlantic City, N. J. Architects, Druckenmiller & Williams, 1527 Chestnut street, Philadelphia. Owner, name withheld. Brick and stucco, 3 stories, 30x65 feet, slate and tile roofs, hardwood floors, vapor heating, electric lighting, tile and marble work. Architects taking bids from local contractors due July 12th. The following are figuring: Wills-Ludwick Co., 34 South Seventeenth street; Lam Building Co., 1001 Wood street; John E. Keamey, 327 North Sixth-third street; Alfred S. Zellfelder, 151 South Broad street, and E. J. Kreitzburg, 1345 Arch street, Philadelphia, and Alfred James, Bala, Pa.

Bridges, Whit Oak, Mt. Hope Branch, Pa., and east of Weston, N. J. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia. Concrete work, waterproofing. Owners taking bids due July 5th and July 2nd, respectively. A. L. Carhart, Penfield Building, Philadelphia, is figuring.

Foundry and Core Room Building (alts.), Newark, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Essex Foundry Co., Newark, N. J. Brick, steel and concrete. Architects taking bids at New York Office. The following are figuring: Enstice Bros., 40 Clinton street, Newark, N. J.; P. Pellochia, 21 Mt. Prospect avenue, Newark, N. J.; Fred G. Kilgus, Inc., 13 South Sixth street, Newark, N. J.; American Concrete Steel Co., Newark, N. J.; Altieri Construction Co., 101 Park avenue; Acksens, Inc., 507 Fifth avenue; Austin Co., 217 Broadway; Cramp & Co., 25 East Twenty-sixth street; Longacre Co., 11 East Fifty-second street; Jacob Zimmermann & Sons, Inc., 103 East Ninety-second street, all of New York City.

Apartment House, Stone Harbor, N. J., \$12,000. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owner, South Jersey Realty Co., Third and Walnut streets, Philadelphia. Frame, 3 stories, 45x 80 feet, shingle roof, electric lighting. Owners are taking sub-bids.

Pig Pens, near Bridgeton, N. J., \$3,000. Architects, Custer & Gill, 304 Market street, Camden, N. J. Owner, name withheld. Hollow tile and shingle, 1 story, 25x56 feet, shingle roof. Plans in progress. Too early for details.

Church, Millville, N. J., \$20,000. Architects, Custer & Gill, 304 Market street, Camden, N. J.; Owner, West Side Methodist Episcopal Church, Millville, N. J. Hollow tile and stucco, 1 story and basement, 47x57 feet, slate or asbestos shingle roof, steam heating, electric lighting, pine floors. Architects taking bids due July 5th. Henry Hoffman, E. K. Garrison and Raymond Zimmerman, all of Millville, N. J., are figuring.

Generator House and Purifier House, Locust and Cherry streets, Camden, N. J. Architect, private plans. Owners, Public Service Gas Co., Newark, N. J. Steel, brick, concrete and corrugated iron, 2 stories, 79x35 feet and 133x39 feet, corrugated iron, ready and slag roof, concrete floors, concrete foundations, roof ventilators, iron stairs (lighting and heating reserved). Owners taking bids, due as soon as possible. Stacy Reeves & Sons, 2011 Market street, Philadelphia, are figuring.

Residence, Trenton, N. J. Architect, W. A. Kleman, Trenton, N. J. Owner, architect. Brick, 2½ stories, 30x50 feet, slate roof, hot water heating, electric lighting, tile and marble work, hardwood floors. Owner is taking sub-bids.

Pasteurizing Plant, Morris Plains, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile and stucco, 1 and 2 stories, 24x36 feet, asphalt shingle roof, shower baths, steam heating, cement floors, iron angles. Lowest bidder, J. J. Lyons, Morris-town, N. J., \$4,960.

Bungalows (2), Morris Plains, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile, 2 stories, 53x36 feet, asbestos shingle roof, steam heating, electric lighting, tile work. Lowest bidder, Jas. Fraser, Hanover avenue, Morris Plains, N. J. School (alts. and add.), Trenton, N. J., \$17,500. Architect, F. H. Bent, State Capitol,

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Trenton, N. J. Owners, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, wing 24x24 feet, steam heating. Lowest bidders, Fimmore & Firth, Bordentown, N. J.

Assembly Hall, Jamesburg, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Board of Managers, State Home for Boys, Jamesburg, N. J. Brick and steel trusses, 1 story, 68x123 feet, slate roof, steam

heating, electric lighting, metal lath. Lowest bidder, Harry Hilton, Trenton, N. J.

Hospital (Dining Hall and Sleeping Quarters add.), Trenton, N. J. Architect, F. H. Bent, State House, Trenton, N. J. Owners, State of New Jersey, Board of Directors, Trenton, N. J. Brick or stone, 3 stories and basement, 40x170 feet, slate roof, fireproof floors, vacuum heating, electric lighting. Low bidders, Matthews Const. Co., Princeton, N. J.

NEW JERSEY

Contracts Awarded

Magazine Buildings (10), Spec. 2927, Lake Denmark, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Washington, D. C. Stucco, brick and steel, 1 story, 198x50 feet, asbestos shingle roof, asphalt, mastic and composition floors, electric lighting, rolled steel sash, fire doors, hollow tile, roof ventilators, waterproofing, damp-proofing. Contract awarded to Geo. Colon & Co., 81 East 125th street, New York City, \$13,920, 130 days.

School, Princeton Township, N. J., \$25,000. Architect, Robert Schuman, 932 Lambertson street, Trenton, N. J. Owners, Board of Education, care of Mr. Anderson, R. F. D. No. 3, Princeton, N. J. Brick, 1 story, 115x60 feet, slag and slate roof, hardwood floors, hollow tile, metal lath, hollow metal sash, fire doors (steam heating, electric lighting and plumbing reserved). Contract awarded to Dempsey & Hardy, Princeton, N. J.

Church, Rochling, N. J., \$15,000. Architect, Robert Schumann, 932 Lambertson street, Trenton, N. J. Owners, Roumanian Greek Orthodox congregation, care of architect. Brick, 1 story, 32x65 feet, slate roof, hardwood floors, steam heating, electric lighting. Contract awarded to J. H. Harris, South Broad Street Bank Building, Trenton, N. J.

Emergency Hospital (6 Buildings), Cape May, N. J., \$89,428, 100 days. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Department of Yards and Docks, Navy Department, Washington, D. C. Wood on concrete piles, 1 story, 126x23 feet, 55x61 feet, 156x23 feet, 112x27 feet, 150x31 feet and 100x27 feet, ready roof, pine floors, steam heating, electric lighting, painting, glazing, plumbing, roof ventilators. Contract awarded to Dawson Const. Co., May Building, Pittsburgh, Pa.

DELAWARE

Construction News

Moving Picture Theatre, New Castle, Del., \$10,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, John C. Tobin, Wilmington, Del. Brick, fireproof construction, limestone trim, 1 story and basement, 30x100 feet, slag roof, steam heating, electric lighting, tile and terrazzo work, concrete floors. Owner is ready for bids.

Residence (alt.), 819 Washington street, Wilmington, \$5,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, John Govatos, on premises. Brick, 3 stories, slate roof, vapor heating, electric lighting, hardwood floors. Architect taking bids due as soon as possible. Joyce & Carrigan, C. J. Dougherty and J. Bader & Co., all of Wilmington, Del. are figuring.

Residence, Wilmington, Del. Architects, Brown & Whiteside, Dupont Building, Wilmington, Del. Owner, Geo. Rucker, Wilmington, Del. Brick, 22x60 feet, slate roof,

hardwood floors, steam heating, electric lighting. Plans in progress. Too early for details.

Residence, Fourteenth and Riverview, Wilmington, Del., \$12,000. Architect, E. Canby May, Dupont Building, Wilmington, Del. Owner, Thomas Kitchoon, Wilmington Del. Brick, 2½ stories, 24x45 feet. Plans in progress. Too early for details.

Residence (alt. and add.), Ninth and Franklin streets, Wilmington, Del. Architect, E. C. May, 432 Dupont Building, Wilmington, Del. Owner, name withheld. Interior alterations, 3 stories, steam heating, electric lighting, hardwood floors, painting, plumbing, decorating and stairways. Architect ready for bids.

Don't be discouraged if you make an occasional mistake; if men didn't there wouldn't need to be any claw on a hammer.

CONCRETE LUMBER IN HOUSE CONSTRUCTION.

Boards of concrete, with joists, rafters and stair frames of the same materials, are used in the construction of a novel building in Los Angeles, California, the whole being set upon a concrete foundation, says the "Scientific American." Though put together after the manner of a frame structure, the building is as fireproof and durable as the more common types of cement houses, but it requires less material and is lighter in weight.

The various parts are poured into forms on the ground near the site, and in that way the danger of breakage is eliminated. The clapboards are poured in sets of ten, the forms being securely clamped together, and the cement allowed to harden in them for several days. Then they are taken out and allowed to cure before being set up. This is done while the preliminary work is going on, such as excavating and laying the foundation.

The joists, rafters and other parts are formed in the same manner, and various types of reinforcing are used for each. The boards are reinforced with mesh like chicken wire, while the timbers have iron rods of varying thickness to strengthen them. These are allowed to project at one end in order to fit into corresponding holes in other timbers, so that the whole framework dovetails. The method of attaching the boards to the 2x4's is with nails, and nail-holes are bored into the cement boards before they have set by running a wire through them. As the cement timbers will not take the nails, a strip of wood about an inch and a half thick is wired to the cement scantling.—"Improvement Bulletin."

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage and Stable, Sixth and Washington avenue, \$4,000. (O), Southwark Coal Company, Sixth and Washington avenue. (C), Mike Cylinder, 521 Mifflin street. 1 story, brick, 53x104 feet, slag roof.

Building, Island road and Bartram avenue, \$8,000. (O), Harry Klosterman, on premises. (C), Wm. J. Mitchell, Island road and Lyon. Slag roof, hot water, 2 story, brick, 36x40 feet.

Dwellings (40), Devereaux and Jackson streets, \$112,900. (O & C), Provident Construction Company, Devereaux and Jackson streets. Brick, 2 story, 15x40 feet, steam heating, slag roof.

Dwelling, Lincoln drive and McCallum street, \$18,000. (O & C), John H. McClatchy, Land Title Building. Shingle roof, hot water, 3 stories, stone, 26x34 feet.

Dwellings (4), Brewster avenue west of Eighty-third street. (O & C), Geo. Kyle, Seventy-third and Gray's avenue. Brick, 2

story, 14x36 feet, slag roof, hot air heating, concrete foundations.

Office Building, Forty-ninth and Botanic avenue. (O), Geo. W. Smith & Co., Forty-ninth and Botanic avenue. (C), John N. Gill & Co., Otis Building. Brick, 1 story, 100.7x107 feet, slate roof.

Restaurant, 12 South Twelfth street, \$6,200. (O), Wm. Penn Charter School, 8 South Twelfth street, (C), Stacy Reeves & Sons, 2011 Market street. Hot water, slag roof, 2 stories, brick, 26x26 feet.

Garage, 6609 North Thirteenth street, \$4,000. (C), E. Doan, 660 North Thirteenth street. (C), Nardy Company, Bulletin Building. Stone, 26x21 feet, 2 story, cement floors, stone foundations, metal lath.

Dwellings (24), Sixtieth and Nassau streets, Sixty-first and Nassau streets. (O & C), Jas. N. Mitchell, Forty-sixth and Market streets. Brick, 2 story, 16x45x15x28 feet 4 inches, slag roof, hot water heating.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Saloon, 4829 Paschall avenue, Philadelphia. Mrs. Mary Crawley (O), 833 South Forty-ninth street, Philadelphia. George E. Lyons (C), 631 South Forty-third street, Philadelphia. Partitions, repairs.

Dwelling, 2654-56-58 Emerald street, Philadelphia, \$1,200. J. Wilson (O), on premises. W. F. Steinbach (C), 943 East Westmoreland street, Philadelphia. Brownstone front.

Store and Dwelling, 606 Sanson street, Philadelphia, \$1,200. G. M. Makhlan (O), 1321 Brandywine street, Philadelphia. P. A. Sorenson (C), 1133 Callowhill street, Philadelphia.

Dwelling, 2332-34 South Sixth street, Philadelphia, \$300. E. E. Graham (O & C), on premises. Brick, 1 story, rear addition, 12x10 feet, slag roof, stone foundations.

Stable, 2525 East Cumberland street, Philadelphia, \$750. Empire Galvanizing Co. (O and C), on premises. Repairs.

Dwelling, 2005 Ellsworth street, Philadelphia, \$300. J. Heisermay (O), 2139 South Sixteenth street, Philadelphia. Lewis Goff (C), 2005 Ellsworth street, Philadelphia. Brick, two-story addition, 11x14 feet.

Dwelling, 4709 Lancaster avenue, Philadelphia, \$600. C. N. Neelman (O), 4709 Lancaster avenue, Philadelphia. J. F. Trent (C), 2041 Master street, Philadelphia. Brick work, alterations.

Dwelling, 1726 South Broad street, Philadelphia, \$400. Joseph B. Trauer (O), 1513 South Broad street, Philadelphia. Andrew Donaldson (C), 2337 Oakford street, Philadelphia. Repairs to porch.

Residence, 128-29 North Broad street, Philadelphia, \$13,000. Schuyler Armstrong (O), on

premises. Pomeroy Const. Co. (C), 1609 Ransdahl street, Philadelphia. Brick, interior alterations.

Sandhouse, League Island, east of Packer street, Philadelphia, \$2,000. Pennsylvania R. R. Co. (O and C), Broad Street Station, Philadelphia. Frame, 1 story, 12x36 feet, stone foundations.

Club House, 5909 Park avenue, Philadelphia, \$700. Mt. Carmel M. E. Church (O), Nedro and Park avenues, Philadelphia. J. S. Rea & Son (C), 1608 Fairmount avenue, Philadelphia. Consists of interior alterations.

Store Building, 723 South X street, Philadelphia, \$2,300. J. Garber (O), on premises. Jacob Bender (C), 1817 South Fourth street, Philadelphia. Repairs.

Storage Building, Glenat and Llewellyn sts., Philadelphia, \$2,500. Clayton Nichols (O), Beach and Poplar streets, Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Brick, 1 story, 42x39 feet, alterations.

Garage, 735 East Tioga street, Philadelphia, \$300. (O), Maude C. Kinney, on premises. (C), Louis Mittelman, 1014 East Tioga street, Philadelphia. Brick, 1 story, slag roof, 14x80 feet, stone foundations.

Store and Dwelling, 740 South street, Philadelphia, \$4,000. (O), S. DuBrow, on premises. (C), J. Gorchov, 4114 Girard avenue, Philadelphia. Brick, 2-stories addition, 12x27 feet, slag roof, plastering and plumbing.

Theatre, Hollywood and Wharton streets, Philadelphia, \$500. (O), Henry Morrison,

2425 South Fifth street, Philadelphia. (C), Nathan Litman, 2030 South Fifth street, Philadelphia. Repairs.

Dwelling, Fifty-eighth and Haverford avenue, Philadelphia, \$500. (O), A. McCrudden, on premises. (C), D. J. McNamee, 1621 North Fifteenth street, Philadelphia. Alterations.

Hotel, 1024 Girard avenue, Philadelphia, \$1,150. (O), John Betz & Son, 411 Callowhill street, Philadelphia. (C), J. S. Cornew, Laurel Springs, N. J. Alterations.

House, 336 Pelham road, Philadelphia, \$1,000. (O), Mrs. Cassards, on premises. (C), Keasbey Mattison, 1927 Market street, Philadelphia. Asbestos shingle roof.

Storage Building, 4163 Lancaster avenue, Philadelphia, \$1,000. (O), H. Rhoads, 738 Holly street, Philadelphia. (C), Chas. Smyth & Son, 215 North Fiftieth street, Philadelphia. Alterations.

Transformer House, Tenth and Rodman streets, Philadelphia, \$500. (O), Johnson Company, 509 South Tenth street, Philadelphia. (C), F. Frank Miller, 1012 Walnut street, Philadelphia. Alterations.

Dwelling, 2271 North Colorado street, Philadelphia, \$400. (O), Nathan Berg, 1616 West Dauphin street. (C), Herbert Steen, 3221 North Seventeenth street. Rear addition, brick, 1 story, 11x14 feet, stone foundations.

Garage, Duncannon and Mascher streets, Philadelphia, \$1,900. (O), Petri Bros., Olney. (C), Emil H. Stahl, 5200 North Third street, Philadelphia. Stone foundations, 1 story, 26x36 feet, slag roof.

Dwelling, 127 North Sixty-third street, Philadelphia, \$600. (O), B. E. Beishlay, on premises. (C), B. Clark, 2016 Callowhill street. Brick alterations.

Pump House, Torresdale avenue and N street, \$1,500. (O), Louis Walther Manufacturing Company, on premises. (C), Geo. Thirsk, 1919 Berks street. Brick, 1 story, 15x26 feet, cement mortar roof.

Office, 2025 South Fourth street, Philadelphia. (O), Dr. S. Giactoe, on premises. (C), Louis Seligson, 534 Merly street. Second story addition, slag roof, brick, 23x12 feet.

Bridge, Main street, southeast of Levering street, \$500. (O), Chas. W. McDowell, on premises. (C), Wm. H. Eddleman & Sons, 453 Green lane, Roxborough. Repairs.

Manufacturing Building, Margaret and Bermuda streets, Philadelphia, \$30,000. (O), Barrett Manufacturing Company, on premises. (C), A. Raymond Raff Construction Company, 1636 West Thompson street, Philadelphia. Brick, frame, 1 story, 124x69 feet, concrete roof.

Manufacturing Building, Margaret and Bermuda streets, Philadelphia, \$45,000. (O), Barrett Manufacturing Company, Margaret and Bermuda streets, Philadelphia. (C), A. R. Raff Construction Company, 1636 Thompson street, Philadelphia. 193x64 feet, concrete roof.

Store, Broad south of Passyunk avenue, Philadelphia, \$1,200. (O), E. G. Kolb, Fifteenth and Snyder avenue, Philadelphia. (C), H. F. Dinkelacker, 227 North Farson street, Philadelphia. Brick, 1 story addition 18x27 feet, stone foundations.

Store, 2732 Germantown avenue, Philadelphia, \$500. (O), Herman Keller Estate, 3709 Germantown avenue, Philadelphia. (C), Miller & England, 1124 Washington avenue, Philadelphia. Alterations.

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

Factory, 148 East Church lane, Philadelphia, \$2,000. (O), Baisdell Paper Pencil Company, on premises. (C), Thomas McKelvey, 4414 Germantown avenue, Philadelphia. Brick, 2 story addition, 13x58 feet.

Garage, 3310 Conley street, Philadelphia, \$300. (O), W. Courtney, on premises. (C), P. Mason, 4727 Edmund street, Philadelphia. Brick, 1 story, 18x11 feet.

Dwellings, 4844-46-48-50 North Front street, Philadelphia, \$300. (O), Chas. Cienkowski, 3006 Richmond street, Philadelphia. (C), Chas. Sinn, 211 Clarkson avenue, Olney, Philadelphia. Sheds, frame.

Manufacturing Building, State road north of Linden avenue, Philadelphia, \$300. (O), Mrs. Harry Thompson, 2628 East Cumberland street, Philadelphia. (C), Harry A. Hobert, 2620 East Cumberland street, Philadelphia. Frame, 1 story, 18x25 feet.

Barn, 1202 City Line, Philadelphia, \$700. (O), H. J. Johnson, Bailey Building, Philadelphia. (C), M. Marks, 5915 Christian street, Philadelphia. Stone, 1 story, 20x30 feet, slag roof.

Garage, 2247 North Broad street, Philadelphia (rear). (O), Mrs. M. Baizley, on premises. (C), John Baizley Iron Works, 514 South Delaware avenue, Philadelphia. Brick, 1 story, 18x25 feet, stone foundations, slag roof, cement floors.

Dwelling, 221 South Eighteenth street, Philadelphia, \$5,000. (O), Edward T. Stotesbury, Drexel Building, Philadelphia. (C), Geo. F. Payne & Co., 401 South Juniper street, Philadelphia. Minor alterations.

Manufacturing Building, Pennypack Creek east of Frankford avenue, Philadelphia, \$12,000. (O), Summerdale Dyeing & Finishing Company, on premises. (C), Jos. A. Hand, Holmesburg, Philadelphia. Brick, 2 story, 50x40x88 feet, slag roof, concrete foundations.

Dwelling, 1316 South Eighteenth street, Philadelphia, \$500. (O), S. Della Valle, on premises. (C), N. Iovachiev, 2227 Moore street, Philadelphia. Brick, 2 story rear addition, 12x18 feet, stone foundations, slag roof.

Manufacturing Building, 462 North Twelfth street, Philadelphia, \$500. (O), Hub Machine Welding & Construction Company, Twenty-second and Race streets, Philadelphia. (C), E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia. Alterations.

Garage, 5010 Knox street, \$400. (O), John Murphy, on premises. (C), Dan Peters, 170 West Seymour street, Philadelphia. Brick, 1 story addition, 16x24 feet, slag roof, stone foundations.

Store and Dwelling, Seventeenth and Tasker streets, Philadelphia, \$325. (O), D. A. Somers, Eighteenth and Tasker streets, Philadelphia. (C), Louis Enatsky, 2447 South Tenth street, Philadelphia. Flush bulks.

Store, Thirteenth and Vine streets, Philadelphia, \$1,500. (O), Electric Theatre Supply Company, Thirteenth and Vine streets, Philadelphia. (C), Samuel C. Campbell, 1215 Columbia avenue, Philadelphia. Alterations, fireproofing.

Garage, 3113 Penn street, Philadelphia, \$750. (O), F. Kimball Hager, on premises. (C), Fred Elvidge Sons, 5522 Germantown avenue, Philadelphia. Brick, 1 story, 12x19 feet, stone foundations, slate roof, cement floor.

Dressing Room, Second and Duncannon streets, Philadelphia, \$800. (O), Germantown Tool Works, on premises. (C), D. W. O'Dea, 5227 North Fifth street, Philadelphia. Mezzanine floor, 26x44 feet.

Dwelling, 2251 North Thirty-third street, Philadelphia, \$1,000. (O), Chas. Stone, on premises. (C), Louis Swerdoff, 228 South Fifty-fifth street, Philadelphia. Alterations.

Restaurant and Office, 204-210 South Tenth street, Philadelphia, \$9,500. (O), Horn & Hardart Baking Company, on premises. (C), Harry R. Rust, 19 South Eighth street, Philadelphia. Brick, 17x33 feet, 4 stories.

Garage, 2617 Hagert street, Philadelphia, \$400. (O), L. A. Hubb Estate, 3016 Cumberland street. (C), Chas. L. Gum, 2546 North Twenty-ninth street, Philadelphia. Brick, 30x40 feet.

Tank Supports, 1826 East Venango street, Philadelphia, \$300. (O), Ajax Processing Company, on premises. (C), H. H. Trump Company, Jenkintown, Pa.

Theatre, Twelfth and Morris streets, Philadelphia, \$2,000. (O), Alhambra Theatre Company, on premises. (C), Ketcham & McQuade, 1029 Brown street, Philadelphia. Alterations.

Shop, 3544 Ruth street, Philadelphia, \$800. (O), Mrs. A. L. Lambert, 3565 Kensington avenue, Philadelphia. (C), Thos. Duff, 4644 Wyoming avenue, Philadelphia. Brick, 1 story, slag roof, 16x18 feet.

Machine Shop, 1620 Washington avenue, Philadelphia, \$1,000. (O), Dougherty & Bachran, 1620 Washington avenue, Philadelphia. (C), Conneen Construction Company, 1737 Filbert street, Philadelphia. Brick.

Storage Building, 345-47 North Third street, Philadelphia, \$1,000. (O), Sternfield Company, 405 North Third street, Philadelphia. (C), Conneen Construction Company, 1737 Filbert street, Philadelphia. New flush bulks.

Dwelling, 5136 Parkside avenue, Philadelphia, \$500. (O & C), F. Zucker, 1727 North Fifty-first street, Philadelphia. Brick work, alterations.

Dwelling and Store, 7122 Paschall avenue, Philadelphia, \$300. (O & C), Michael Russo, on premises. Brick, 1 story additional, 17x8 feet, stone foundations.

Residence, Mitchell street and Green lane, \$2,000. (O), Frank M. Kaufman, 473 Gerhart street, Philadelphia. (C), Wm. H. Eddleman & Sons, 453 Green lane, Roxborough. Alterations, hot air heating system.

Garage, 3828 Terrace street, Philadelphia, \$3,000. (O), John Lord & Son, on premises. (C), Wm. H. Eddleman & Sons, 453 Green lane, Roxborough. Brick, 1 story, 16x27 feet.

Boiler House, Wheatshaf lane and Coral street, Philadelphia, \$3,000. (O), R. H. Foerderer, Inc., on premises. (C), Geo. Kessler Construction Company, Drexel Building, Philadelphia. Alterations.

Boiler House, Torresdale avenue and street, Philadelphia, \$2,000. (O), Louis Walther Manufacturing Company, on premises. (C), Geo. H. Thirsk, 1919 Berks street, Philadelphia. Slag roof, brick, concrete foundations.

Toilet Building, Thirty-first and Thompson streets, Philadelphia, \$700. (O), J. & P. Baltz Company, on premises. (C), E. R.

Hall, 34 South Seventeenth street, Philadelphia. Brick, 1 story, 7x14 feet, concrete foundations, tin roof.

Store, Eighth and Federal streets, Philadelphia, \$1,500. (O), Chas. Livingston, on premises. (C), Basch & Co., 1426 South Front street, Philadelphia. Flush bulks.

Club, Eleventh and Catherine streets, Philadelphia, \$5,000. (O), Wm. Rocap, Public Ledger, Philadelphia. (C), Jos. Foster, 3200 Sansom street, Philadelphia. Alterations.

Garage, 2532 North Eighth street, Philadelphia, \$350. (O), J. Milman, on premises. (C), John Gallatig, 447 West Dauphin street. Alterations.

Store and Dwelling, 400 South Forty-third street, Philadelphia, \$800. (O), H. H. Lappel, on premises. (C), The Nardy Company, Bulletin Building, Philadelphia. Brick, 1 story, stone foundations, plastering, 6x16 feet.

Dwelling, 5137 Parkside avenue, Philadelphia, \$725. (O & C), Wm. Zuckerman, on premises. Alterations.

Dwelling, 136 West Upsal street, \$1,500. (O), E. E. Meacham, on premises. (C), S. F. Godschall, 6632 Ross street, Philadelphia. Brick, 2 stories, 16x19 feet.

Garage, 411 West Harter street, \$390. (O), Miss A. Cope. (C), M. Mauster Company, 3931 North Fifth street. 14x18 feet, iron, metal lath.

Garage, Marune north of Wagner avenue, \$1,600. (O), C. Buttermilk. (C), Marster Company, 3931 North Fifth street, frame and iron, 46x30 feet.

Store and Dwelling, 254-56 South Twelfth street, \$5,000. (O), Philomena Bosla, on premises. (C), Frank Lauer, 1103 Ellsworth street, 2 story, brick, 6x36 feet, stone foundations.

Dwelling, 433 East Haines street, \$300. (O & C), B. S. Penn, 523 East Haines street. 25x15 feet, stone foundations.

Dwelling, Ninth and Mifflin streets, \$500. (O) J. Linker, 1755 North Thirty-first street. (O), Wm. Linker Company, 831 Cherry street. 12x16 feet, back addition, brick, 16x12 feet, slag roof.

Store and Dwelling, 1344 Poplar street, \$300. (O), George Johnson, 1222 Walnut street. (C), Thomas J. Carberry, Heed Building. Alterations.

Garage, Wigard and Ridge avenues, \$600. (O), E. Bennett, 4347 Manayunk avenue. (C), C. L. Culbertson, 334 Roxborough. Frame, 1 story, 14x16 feet, slate roof.

Dwelling, 327 North Eighteenth street, \$650. (O), G. A. Mantz, 227 North Eighteenth street. (C), Braun Heating Co. heating system.

Garage, 223 North Harter street, \$485. (O), W. D. Edison, on premises. (C), C. A. Neffner, 6361 Jefferson street Shinkle roof.

School, Eleventh and Moore streets, \$430. (O), Board of Education, Keystone Building. (C), E. C. Durell, 1713 North Twenty-fourth street. Repairs.

Lunch Room, 1526 Cuthbert street, \$500. (O), Pennsylvania Railroad, Philadelphia. Alterations.

Storage Building, Wheatshaf and Sepviva street. (O), American Engineering Company, Arimingo and Cumberland. (C), P. Harbach Construction Company, 1261 North Twenty-sixth street. 24x90 feet, slag room, frame, 1 story.

Reference Directory for Architects, Builders and Owners

Artesian Wells.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Ridpath & Potter Co.....Bourse Bldg., Phila.
John B. Rulon.....1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

Chas. H. Robbins.....125 S. 11th st., Phila.
Warren-Knight Co.....136 N. 12th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Blue Prints.

Chas. H. Robbins.....125 S. 11th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Blue Print Paper.

Chas. H. Robbins.....125 S. 11th st., Phila.

Brick (Face, Etc.).

O. W. Ketcham.....Builders' Exchange, Phila.

Brick Renovating.

Adolph Christensen.....1433 Brown st., Phila.

Builders.

Hogg Construction Co., Inc.,
1634 Sansom st., Phila.
Mitchell Bros.....125 Race st., Phila.
Pomeroy Const. Co.....1609 Ransstead st., Phila.

Builders' Supplies.

P. H. Fairlamb Co.....115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.

Builders' Equipment.

Service Equipment Co.....Bourse Bldg., Phila.

Cement.

P. H. Fairlamb Co.....115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.
Lehigh Portland Cement Co.,
Finance Bldg., Phila.

Columns (Metal).

Pearce Fireproof Co.....1345 Arch st., Phila.

Composition Flooring.

The Barrett Company,
New York and Philadelphia.
Philadelphia Mineral Flooring Co.,
5632 Summer st., Phila.
Woodoleum Manufacturing Co.,
203 Liberty Bldg., Phila.

Dampproofing.

The Barrett Co.....New York City and Phila.

Drawing Materials.

Charles H. Robbins.....125 S. 11th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Electrical Construction.

Baird-Osterhout Construction Co.,
1620 Chancellor st., Phila.

Elevators.

A. B. See Electric Elevator Co.,
Colonial Trust Bldg., Phila.

Engineers' Supplies.

Charles H. Robbins.....125 S. 11th st., Phila.
Warren-Knight Co.....136 N. 12th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Fences.

Anchor Post Iron Works,
Real Estate Trust Bldg., Phila.

Fire Doors.

Merchant & Evans Co.,
2035 Washington ave., Phila.

Fireproofing.

General Fireproofing Co., 832 Arch st., Phila.
Henry S. Harris.....Land Title Bldg., Phila.
Pearce Fireproof Co.....1345 Arch st., Phila.
Truscon Steel Co.....Commonwealth Bldg., Phila.

Floor Plates.

Alan Wood Iron and Steel Co.,
Widener Bldg., Phila.

Furnaces and Ranges.

Borden Stove Co.....1311-13 Arch st., Phila.
Henry M. Miller.....46-48-50 N. 2d st., Phila.
Richardson and Boynton Co 1332 Arch st., Phila.

Garage (Portable)

Service Equipment Co.....Bourse Bldg., Phila.

Granite.

Holmeburg Granite Co.,
Commercial Trust Bldg., Phila.

Hauling Contractors.

Barber Contracting Co.,
1127 Land Title Bldg., Phila.

Heating Contractors.

Bowers Bros. & Co.1629 Ludlow st., Phila.

Heating Boilers.

Borden Stove Co.....1311-1313 Arch st., Phila.
Fleck Bros. Co.44 N. 5th st., Phila.
Richardson and Boynton Co 1332 Arch st., Phila.

Insurance.

Harris J. Latta.....Penna. Bldg., Phila.
Insurance Co. of North America,
3rd and Walnut sts., Phila.

Lighting Fixtures.

Staman & Dickey.....30 S. 16th st., Phila.

Lumber.

James E. Tague & Co.,
10th and Columbia ave., Phila.

Marble Mosaic.

Belfi Bros. & Co.....1923 Market st., Phila.
Italian Marble Mosaic Co.....433 Spruce st., Phila.

Metal Lath.

General Fireproofing Co., 832 Arch st., Phila.
Pearce Fireproof Co.....1345 Arch st., Phila.
Truscon Steel Co.....Commonwealth Bldg., Phila.

Meters.

Philadelphia Meter Co.,
Real Estate Trust Bldg., Phila.

Mill Supplies.

The Fairbanks Co.....7th and Arch sts., Phila.
Service Equipment Co.....Bourse Bldg., Phila.

Paints and Varnishes.

The Barrett Company,
New York and Philadelphia.
Felton, Sibley & Co.....136 N. 4th st., Phila.

Pipe Fittings and Valves.

The Fairbanks Co.....7th and Arch sts., Phila.

Plumbing Fixtures.

Fleck Bros. Co.....44 N. 5th st., Phila.
James A. Vogel Co.....Wilmington, Del.
Keystone Supply & Mfg. Co., 913 N. 9th st., Phila.

Preservatives (Wood and Concrete).

The Barrett Co.....New York City and Phila.

Ranges.

Borden Stove Co.....1311-13 Arch st., Phila.
Henry M. Miller.....46-48-50 N. 2d st., Phila.
Richardson and Boynton Co.....1332 Arch st., Phila.

Refrigerators.

Borden Stove Co.....1311-13 Arch st., Phila.
Henry M. Miller.....46-48-50 N. 2d st., Phila.

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Truscon Steel Co.....Commonwealth Bldg., Phila.

Roofing.

The Barrett Co.....New York City and Phila.

Roofing Tile.

O. W. Ketcham.....Builders' Exchange, Phila.

Scales.

The Fairbanks Co.....7th and Arch sts., Phila.

Sewer Pipe and Flue Linings.

C. F. Shellenberger...Builders' Exchange, Phila.

Sewage Disposal.

Harrison, Mertz & Emlen, Inc.,
Commercial Trust Bldg., Phila.

Soundings.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Ridpath & Potter Co.....Bourse Bldg., Phila.
John B. Rulon.....1355 Colwyn st., Phila.

Sprinklers.

Merchant & Evans Co.,
2035 Washington ave., Phila.

Surety Bonds.

Harris J. Latta.....Penna. Bldg., Phila.

Terra Cotta (Architectural).

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Test Borings.

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John B. Rulon.....1355 Colwyn st., Phila.

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Belfi Bros. & Co.....1923 Market st., Phila.
Italian Marble Mosaic Co.....433 Spruce st., Phila.

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Merchant & Evans Co.,
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1918

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126th Annual Statement	December 31, 1917
Cash Capital - - -	\$ 4,000,000.00
Reserve for Premiums - - -	10,630,740.40
Reserve for Losses - - -	4,419,000.00
Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
Losses Paid Since Organization - - -	192,518,273.33

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Vol. XXXIII., No. 28
July 10, 1918

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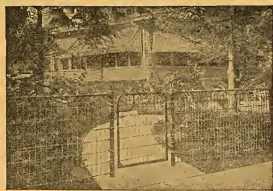
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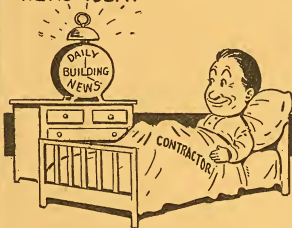


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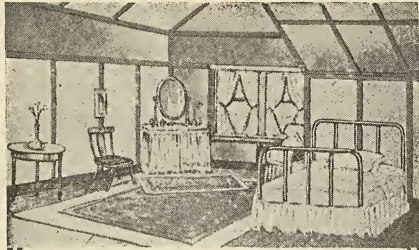
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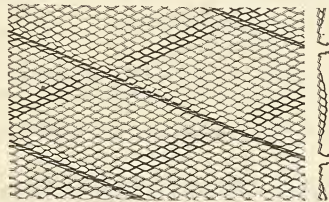
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 28

PHILADELPHIA
July 10, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record

and Builders' Guide

PUBLISHED WEEKLY

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As The Editor Sees It



IN this, the Semi-annual Building Statistics Number of THE GUIDE, is reported a detailed and accurate account of local structural activities of all kinds for the first six months of 1918. During the year there has been a great uncertainty concerning building, but the situation can now be viewed with statistical clarity.

No one has expected a good building year; every one concerned knows all the hardships to which the building trade has been subjected, and yet there are several reasons for believing that the worst period of depression is over.

In the first place, Mr. McAdoo's views regarding building were so variously misrepresented and misconstrued that people in general were most reluctant to begin building of any kind, whether the project seemed necessary or not. Many prospective builders, convinced that the cost of materials and labor had advanced for an indefinite period, had decided to build notwithstanding; these were again thrown into chaos by the uncertainty regarding the Government's attitude. Since this unsettled condition has passed, many deferred projects will doubtless proceed.

In comparing the corresponding period of 1917 and 1918 we find that the total work of all kinds from January 1 to June 1, 1917, amounted to \$20,531,220, as against \$9,129,285 for the first half year of 1918.

In only three items did the first six months of 1918 show an increase over 1917. During the first half of 1917 the

total number of one-story dwellings built was 4, involving a cost of \$5,100; during this period of 1918 there were built 7 one-story dwellings, costing \$15,000. From January to June, 1917, there were built 23 office buildings at a total cost of \$370,930; the number of office buildings so far in 1918 is only 14, but the cost involved is \$1,074,525. Foundries and shops likewise have decreased in number but increased in cost, there being during the first half of 1917 39 erected at a cost of \$90,430, as against 24 during the same period of 1918, at a cost, however, of \$219,550. During the first half of each year there was only 1 school erected, the cost in 1917 being \$130,000 and in 1918 \$113,000. In additions and repairs, 1918 has about held its own, there being 496 additions and 1,139 alterations and repairs, as against 627 additions and 1,331 alterations and repairs from January to June in 1917.

The report, of course, leaves much to be desired, but conditions are actually much better than the report shows, due to the immense amount of Government work in and around Philadelphia which does not, of course, appear in the report.

* * *

WE are forcibly reminded at the present time of the need for conservation of all resources, and it is to this purpose that the National Board of Fire Underwriters is now expending energy to reduce loss by fire. The Board has issued a fire prevention manual,

"Safeguarding the Home Against Fire," which has received the endorsement of many state fire marshals, insurance commissioners and other officials, and will probably be adopted for use as a textbook by the public schools in many cities and towns.

In view of the great decrease in building, and of the increase in cost in repairing and replacing loss by fire, we deem this movement most worthy of consideration at this time.

At the fifty-second annual meeting of the National Board of Fire Underwriters, held last month in New York City, President R. M. Bissell said:

"A year ago we had begun to supply the Government with a vast amount of specific data concerning factories available for producing munitions of war. This work is still continuing and it has now covered a total of more than thirteen thousand separate plants. We have been assured that this work is deemed by the Government to be of exceptional value.

"The national campaign for conservation, especially of factories, grain elevators and other important properties of all kinds, acquired during the summer and fall of 1917, an importance which was far beyond our anticipations when the movement was first organized. With no desire to boast, but in order to do justice to the hundreds and thousands who have co-operated so effectively in this movement we can confidently assert that this work

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has been an extremely valuable public service.

"Tens of thousands of separate plants have been inspected many of them repeatedly. Thousands of the suggestions for improvement made by our inspectors have been carried into effect by the property owners who under the plan adopted have been led to see that it was their patriotic duty to preserve from destruction that fraction of the nation's wealth entrusted to their care.

"By far the greater portion of our work for the Government has been in connection with the War Department and this work has now acquired a permanent status by the establishment of a Fire Prevention Bureau of the National Board of Fire Underwriters in the War Department at Washington.

"Despite the vast amount of time and

effort given to Government work the usual problems of fire underwriting have been present with us, although affected as all things are by war conditions. The complete fire loss statistics will undoubtedly show a large increase in the value of property destroyed as compared with the preceding year. All unofficial estimates agree in this judgment. According to the best data now available the figures for 1917 are likely to reach \$250,000,000 as compared with \$214,000,000 for 1916. Should this figure be substantiated by our investigations it will give us a disquieting increase in the per capital loss from \$2.10 to \$2.42.

"It remains true as heretofore that carelessness and neglect are the great fundamental causes lying back of nearly all of the assigned fire causes. But the marked increase in losses for the year

just closed is probably chiefly due to the abnormal industrial conditions brought about by the war, coupled with extraordinarily cold weather during the last portion of the year, which, in conjunction with the fuel shortage, caused very heavy losses in highly protected risks of large values.

"The hasty construction of new factories and the enlargement of old ones, the congestion both in factories and warehouses, overtime work to the extent in many cases of the employment of three shifts of hands, the unavoidable employment of inferior workmen and the constant shifting of workmen from one industry to another, to say nothing of the vast increase in the production of inflammable and explosive substances, have all combined to introduce industrial fire hazards on a scale hitherto unknown."

PHILADELPHIA AS A BUILDING CENTER

A Classified and Tabulated Statistical Review of Structural Activities During 1918

Number of New Buildings Erected from January 1st to June 30th, 1918

	Jan.	Feb.	March.	April.	May.	June.	Total Operations.	Estimated Cost.
One-story Dwellings	37	62	126	140	161	128	654	\$15,000
Two-story Dwellings	3	1	5	6	13	7	35	1,960,960
Three-story Dwellings	2	1	3	1	4	3	14	221,500
Office Buildings	0	2	3	4	5	3	17	1,074,525
Warehouses	1	3	2	5	6	8	25	238,900
Factories	3	2	8	3	1	7	24	837,300
Engine and Boiler Houses	1	..	1	..	..	..	1	95,000
Poundries and Shops	3	2	3	3	1	7	24	219,550
Stores	1	..	1	..	1	2	5	72,500
Churches	1	2	..	..	..	..	3	15,550
Stables	..	..	1	1	..	1	3	1,150
Schools	..	..	..	1	..	..	1	113,000
Frame Dwellings	..	..	2	1	1	..	4	13,600
Tenement Houses	9	17	54	77	77	54	288	24,000
Garages	..	..	2	..	1	2	5	587,800
Power Houses	1	..	..	1	..	..	2	61,950
Round Houses	..	..	..	..	..	..	..	350,000
Places of Amusement	13	6	15	13	17	11	75	120,000
Miscellaneous Buildings	..	..	..	..	..	..	..	203,140
Total New Buildings.....	71	97	225	255	291	226	1165	\$6,165,425
Additions	28	30	95	124	113	106	496	1,372,735
Alterations and Repairs.....	104	129	200	259	221	226	1139	1,243,185
Grand Totals							2800	\$8,781,345
Heaters							40	33,975
Fire Escapes							10	8,560
Signs							10	3,885
Miscellaneous unclassified work.....							538	301,520
Total work of all kinds.....							3398	\$9,129,285

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Factory, Allegheny avenue and Tulip street, Philadelphia. Engineers, Wm. Steel & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, David Lupton's Sons Co., care of L. H. Forstner, on premises. Steel, 1 story, 140x300, gypsum slag roof, cement floors, concrete foundations, Pond sash. Plans in progress. Wm. Steele & Sons Co. and owners will take bids.

Residence and Garage, Lincoln Drive and Carpenter street, Philadelphia. Architects, Druckenmiller & Williams, 1527 Chestnut street, Philadelphia. Owner, Dr. B. B. Simon, Eighth and Market streets, Philadelphia. Stone, stucco and brick, 2 stories, 32x66 feet, wing 34x18 feet, and 2 stories, 25x35 feet, slate roof, hot water or vapor heating, electric lighting, hardwood and cement floors, tile work. Architects taking bids, due July 12th. Wm. J. Grubler & Co., 219 East High street; E. J. Hedden, Finance Building; Samuel Harting, 20 E. Johnson street; A. L. Pretz & Son, Heed Building, Philadelphia; Alfred James, Bala, Pa., and W. John Stevens, Inc., Wyn-cote, Pa., are figuring.

Residence (add.), 49 Bethlehem Pike, Chestnut Hill, Philadelphia. Architects, Broekie & Hastings, 1713 Sansom street, Philadelphia. Owner's name withheld. Stone, 3 stories, 12x20 feet, general alterations, slate roof, hot air heating, electric lighting, tile and marble work, pine floors. Architects taking bids, due July 10th. F. E. Wallace, 1220 Chancellor street; H. H. Burrell, 206 South Quince street, and Wm. J. Grubler & Co., 219 East High street, are figuring.

School (alts. and add.), 918 Locust street, Philadelphia. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owners, Locust Street Mission, on premises. Brick, 2 stories, fire tower and general interior alterations, slag roof, vapor heating. Architect taking bids, due July 12th. R. C. Ballinger & Co., 218 North Thirteenth street; Frank E. Wallace, 1220 Chancellor street, and H. E. Grau Co., 1707 Sansom street, are figuring.

Garage, 1720-26 Callowhill street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Benj. Alexander, care of architect. Brick, 1 story, 62x115 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, gasoline storage system. Architect taking bids. F. B. Davis, 240 North Sixteenth street; F. A. Havens & Co., 845 North Nineteenth street; E. E. Hollenback, Inc., 1804 Brandywine street, and Albert Zellfelder, 151 South Broad street, are figuring.

Building (alts.), Fifth and Chestnut streets, Philadelphia. Architect, private plans. Owners, City of Philadelphia, Department of Public Works, 113 City Hall. Repairs to roof.

Lowest bidder, E. C. Durell, 1713 North Twenty-fourth street, \$5,936.

Garage, Ninth and Luzerne streets, Philadelphia, \$8,000. Architect, private plans. Owner, John T. Clasby, 4355 North Ninth street, Philadelphia. Stone, 1 story, 90x132 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors. Owner will build.

Twin Residence, Vincent street, east of Oakley street, \$6,000. Architect, private plans. Owner, C. M. Stevens, 910 Fanshaw street, Philadelphia. Brick, 3 stories, 14x22 feet, slate roof, stone foundations, hot water heating, electric lighting, hardwood floors. Owner will build.

Bank and Office Building (add.), southwest corner of Fifty-second and Market streets. Architect, Wesley Leshner Blithe, 608 Chestnut street, Philadelphia. Owners, Market Street Title and Trust Co., Alex. Wilson, Jr.,

president, on premises. Two additional stories to present building, brick, concrete and steel, 90x120 feet, ornamental terra cotta, slag roof, concrete and tile floors, steel filing cabinets, modern equipment. Plans in progress. Architect will be ready for bids in about one month.

Store Building (alts.), 216 Arch street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Ernest Schwehm, care of architect. Consists of interior alterations. Architect taking bids, due July 12th. Lam Building Co., 1001 Wood street, and Smith-Hardican Co., 1606 Cherry street, are figuring.

Carpenter Shop, northeast corner of Nineteenth and Lehigh avenue, Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, Chas. H. Wheeler Manufacturing Co., Eighteenth and Lehigh avenue. Brick, 1 story, size of

N. B.—The wards omitted from the following tables are eliminated in order to conserve space, no permits having been reported therefrom during the year.

TWO-STORY DWELLINGS—Including Two-story Stores and Dwellings

Wards	3	18	21	22	23	25	33	34	35	38	40	41	42	45	46	Totals
Jan.	.	.	6	.	.	.	.	.	.	22	9	.	.	.	.	37
Feb.	.	2	.	.	.	.	.	.	.	2	56	.	1	1	.	62
March	.	.	3	9	.	.	.	.	.	3	25	40	46	.	.	126
April	1	.	3	.	4	1	31	.	.	4	20	.	76	.	.	140
May	.	.	.	.	.	.	.	19	2	.	114	.	26	.	.	161
June	.	.	.	.	.	.	.	23	8	.	5	50	41	.	1	128
Totals	1	2	12	9	4	1	31	42	14	27	229	90	190	1	1	654

THREE-STORY DWELLINGS—Including Three-story Stores and Dwellings

Wards	1	4	21	22	23	34	40	42	Totals
Jan.	.	.	2	.	.	1	.	.	3
Feb.	1	.	.	.	.	.	.	.	1
March	.	.	.	.	.	4	.	1	5
April	.	.	.	.	.	4	2	.	6
May	.	.	.	.	.	.	12	1	13
June	.	2	.	2	.	2	.	1	7
Totals	1	2	2	2	5	20	1	2	35

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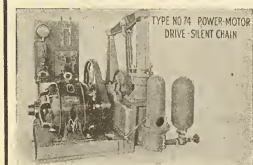
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lot, 236x80x147x202 feet. Preliminary sketches in progress. Too early for details.

Loading Racks, south of Passyunk avenue, Bridge Harbor and Wharf Lines of Atlantic

Refining Co., Philadelphia. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue, Philadelphia. Oak piles, steel work, 8 feet high, 80x320 feet, ornamental iron work. Owners will build.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Store Building (alts.), 908 Walnut street, Philadelphia, \$4,700. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, J. Lipschutz, care of architect. Consists of flush bulks, steam heating, plumbing, tile work, rolled steel skylights, hardwood floors, glazing, marble work. Contract awarded to Davis & Clayton, 1817 North Twentieth street.

Building for Housing Radio Tractors, Navy Yard, Philadelphia, \$4,248. Architect, private plans. Owners, U. S. Government, care of De Witt C. Webb, Navy Yard, Philadelphia. Frame, 1 story, 100x56 feet, ready roof, steam heating, electric lighting, plumbing and glazing. Contract awarded to T. C. Trafford, 1613 Sansom street, Philadelphia.

Machine Shop, Fourth and Federal streets, Philadelphia, \$45,000. Architect, private plans. Owners, Southwark Foundry and Machine Co., on premises. Brick, steel and concrete, 1 story, 55x129 feet, slag roof, rolled steel sash. Contract awarded to F. L. Hoover & Sons, 1023 Cherry street.

Factory (alts. and add.), 621-23 Wood street, Philadelphia, \$7,000. Architect, private plans. Owner, Chas. W. Lawser, Seventh and Wood streets, Philadelphia. Brick, 1 story, interior alterations, 21x42 feet, slag roof, pine floors; plumbing, steam heating. Contract awarded to Wark-Yardley Co., 1757 Filbert street.

Building for Clothes and Shoe Repairing, Navy Yard, Philadelphia, \$4,485. Architect,

private plans. Owners, U. S. Government, care of De Witt C. Webb, Navy Yard, Philadelphia. Frame, 1 story, 32x160 feet, ready roof, steam heating, electric lighting, plumbing and glazing. Contract awarded to Edw. Fay & Son, 2 South Mole street, Philadelphia.

Shed, Water and Greenwich streets, Philadelphia, \$3,600. Architect, Chas. E. Oelschlag, 1615 Walnut street, Philadelphia. Owner, W. J. O'Brien, on premises. Frame, 100x100 feet, slag roof. Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Building (alts.), 1215 Race street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, H. Marks, care of architect. Consists of interior alterations to upper floors. Contract awarded to A. H. Spenard, 822 Wood street, Philadelphia.

Synagogue (alts.), Broad street, near Columbia avenue. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Keneseth Israel Congregation, care of C. Braunschweig, secretary, 512 Spruce street, Philadelphia. Interior alterations. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Buildings (alts.), Nos. 2, 3, 5, 5A and 10, Job No. 62, Schuylkill Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. E. Boller, Schuylkill Arse-

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nal. Terra cotta fireproofing, fire doors, rolled steel sash, cement floors, hollow tile, metal lath, wire work. Contract awarded to Chas. Gilpin, Harrison Building, Philadelphia.

Warehouse and Storage Building, Margaret and Bermuda streets, \$66,000. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Reinforced concrete, 3 stories, 88x32 feet, and 2 stories, 109x59 feet, slag roof, cement floors, electric lighting, rolled steel sash. Contract awarded to A. R. Raff Const. Co., 1635 Thompson street, Philadelphia.

Locker Building, 13-15 Christian street, Philadelphia. Architect, private plans. Owners, Murphy, Cook & Co., Bourse Building, Philadelphia. Brick and steel, 2 stories, 72x36 feet and 48x34 feet, Johns-Manville roof, cement floors, metal lath, rolled steel sash, concrete footings, dampproofing. Contract awarded to Frank G. Stewart, 1619 Sansom street, Philadelphia.

Foundry (add.), Ruffner and Donath streets, Philadelphia, \$7,000. Architect, private plans. Owners, Niles-Bement-Pond Co., Twenty-first and Calhounhill streets, Philadelphia. Brick and steel, new columns and new bays. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

Factory (alts. and add.), Twenty-fourth and Vine streets, Philadelphia, \$3,000. Architect, private plans. Owners, John Lang Paper Co., on premises. Steel and concrete platforms. Contract awarded to Wm. H. Eddleman & Sons, 453 Green Lane.

Factory (add.), Tackawanna, south of Church Road, \$8,700. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owners, Geo. Oldham & Son Co., 4320 Tackawanna street. Brick (slow burning construction), 2 stories, 16x33 feet, slag roof, stone foundations, pine floors, electric lighting. Contract awarded to Rush Bros., 1100 Fillmore street, Philadelphia.

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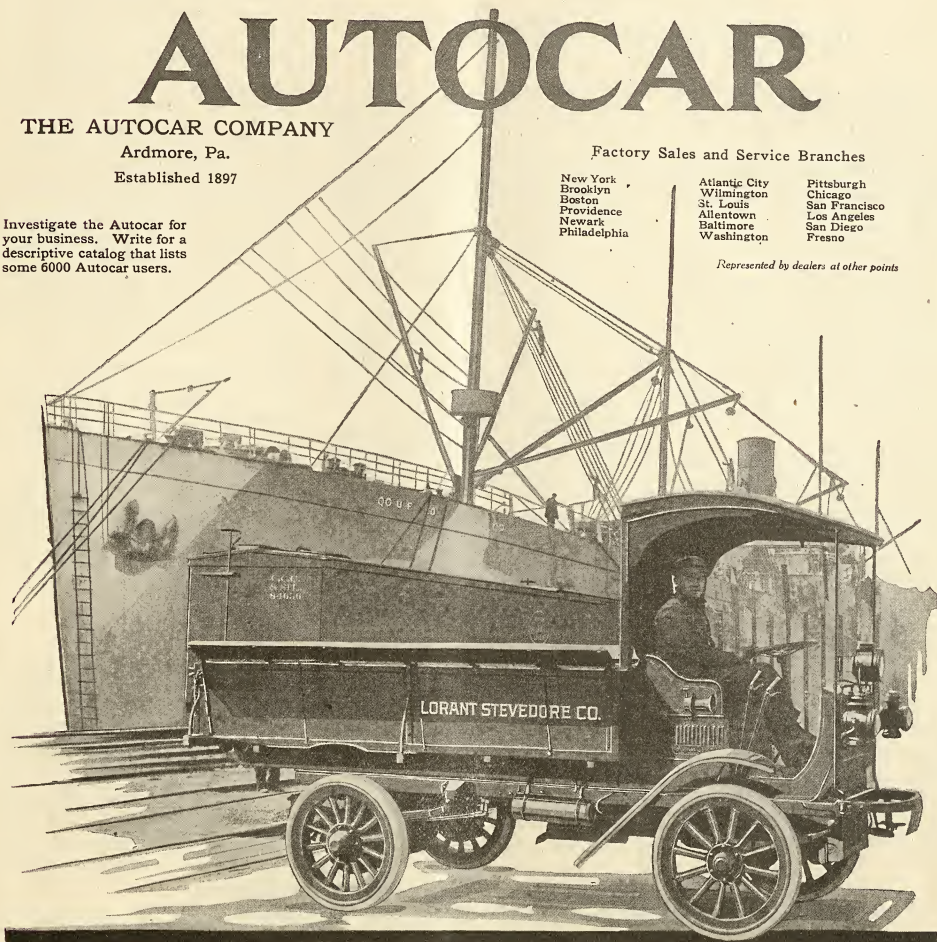
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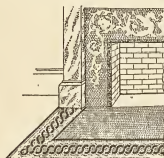
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PENNSYLVANIA Construction News

Office Building, Marcus Hook, Pa. Architect, W. A. Courtenay, Jr., Marcus Hook, Pa. Owners, Sun Company, Marcus Hook, Pa. Brick, steel and drop roof, terra cotta, 2 stories, 81x65 feet, slag roof, cement floors, steam heating, electric lighting, terrazzo work, rolled steel sash and skylights, metal doors, metal lath, safety trends, roof ventilators, metal window guards, waterproofing and dampproofing. Owners have received bids.

Residence, Scranton, Pa. Architect, Lewis Hancock, Mears Building, Scranton, Pa. Owner, S. J. Jennings, Scranton, Pa. Brick, 2½ stories, 36x37 feet, shingle cressote dipped roof, steam heating, electric lighting, tile work, hardwood floors. Owner ready for bids.

Theatre (alts.), Freeland, Pa. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Freeland Opera House, care of Rev. C. J. Manley, Freeland, Pa. Consists of general interior alterations, 2 stories, painting, plastering, carpentry, reinforced concrete work. Owners taking bids, due as soon as possible.

School (alts. and add.), Throop, Pa., \$30,000. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Board of Education, care of M. J. Magan, Throop, Pa. Frame, 4-room addition, 2 stories, 40x36 feet, slate roof, stone foundations (heating and plumbing reserved), electric lighting. Owners taking bids, due July 11th.

School, Nicholson, Wyoming County, Pa., \$23,000. Architects, Morris & McHale, Burr Building, Scranton, Pa. Owners, Board of Education of Nicholson, care of architects. Frame and stucco, 2 stories and basement, slag roof, stone foundations, steam heating, electric lighting, ornamental tile work, marble work, metal lath, roof ventilators. Architects taking bids. Hagen Lumber Co., Hauer & Stender, Stender Bros., Holt Lumber Co., all of Scranton, Pa., and the Bought Lumber Co., Nicholson, Pa., are figuring.

Passenger Station, Kimberton, Pa. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Pickering Valley R. R., Reading Terminal, Philadelphia. Stone and brick, 1 story, 37x18 feet, slate roof, yellow pine floors, concrete foundations, electric lighting. Engineer taking bids, due July 12th. F. W. Van Loon, Denekla Building, and A. L.

Carhart, Penfield Building, are figuring.

Garage, Dorranceton, Pa., \$6,000. Architect, Geo. S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Dorranceton Silk Works, care of architect. Brick and concrete, 1 story, 27x82 feet, slag and gravel roof, electric lighting, terra cotta, hollow metal skylights, fire doors, sliding doors, waterproofing. Owners will be ready for bids in a few days.

Residence, Tamaqua, Pa. (Broad street), \$6,000. Architect, W. H. Lee, Shanokin, Pa. Owner, Joseph Shiff, Tamaqua, Pa. Brick, 2 stories, asbestos shingle roof, hardwood floors, steam heating, electric lighting, tile work. Architect is ready for bids.

Silk Mill, Monroe street, Wilkes-Barre, Pa. Architect, private plans. Owners, McGanna Bros., Wilkes-Barre, Pa. Brick, 2 stories, 48x78 feet, slag roof, steam heating, electric lighting, hollow metal sash, iron work. Builders, J. A. Schmitt & Sons, Wilkes-Barre, Pa., are taking sub-bids.

Bank (alts. and add.), Shenandoah, Pa. Architect, P. A. Kley, Coleman Building, Philadelphia. Owners, Miners' Banking Co., Shenandoah, Pa. Reinforced concrete and brick, plate glass, cement floors. Owners taking bids. Frank G. Stewart, 1619 Sansom street, Philadelphia, is figuring.

Cowbarn, Creamery and Retaining Wall, etc., Spring City, Pa. Architect, Philip H. Johnson, Land Title Building, Phila. Owners, State Institution for Feeble Minded of Eastern Pennsylvania, Spring City, Pa. Concrete and hollow tile, 2 stories, 108x36 feet, and two wings, 33x36 feet, and 2 stories, 51x36 feet, asbestos shingle roof, cement, cork and brick floors, steam heating, electric lighting, concrete foundations, hollow tile, metal lath, freight elevators, roof ventilators, waterproofing and dampproofing, iron work. Architect taking bids, due July 24th at 10.30 A. M. Frank G. Stewart, 1619 Sansom street, Philadelphia; Wm. H. Wiand and Fred H. Kaiser, or Pottstown, Pa., are figuring. (Deposit of \$30.00 required to obtain set of plans. Refund of \$20.00.)

Bungalows, Harrisburg, Pa. Architect, T. H. Hamilton, 11 Market Square, Harrisburg, Pa. Owner, T. H. Hamilton, 11 Market Square, Harrisburg, Pa. Brick, 2 stories, slate roof, hardwood floors, hot water heating, electric

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lighting, tile work, metal lath. Owner will build and will take sub-bids.

Storage House, Hazleton, Pa., \$250,000. Architect, private plans. Owners, Worthington Pump and Machine Co., Hazleton, Pa., and U. S. Government, Ordnance Department, Procurement Division, Washington, D. C. Reinforced concrete, brick and steel, 1 story, 100x200 feet, slag roof, steam heating, electric lighting, rolled steel sash (sprinkler system for entire plant, \$60,000, and underground electric plant, \$50,000). Worthington Pump and Machine Co., Hazleton, Pa., are taking sub-bids.

Dry Kilns (20), Eddystone, Pa. Architect, private plans. Owners, Midvale Ordnance and Rifle Co., Eddystone, Pa., and U. S. Government, Ordnance Department, Washington, D. C. Brick, 25x18x15 feet, steam heating, galvanized iron doors. Midvale Ordnance and Rifle Co., Eddystone, Pa., taking sub-bids.

Residence (alts. and add.), Devon, Pa. Architect, Wesley Lesher Blithe, 608 Chestnut street, Philadelphia. Owner, Geo. R. Lancaster, 1303 North Broad street, Philadelphia. Stone and rough cast, 2½ stories, 82x50 feet, tin roof, hardwood floors, hot water heating, tile and marble work. Plans about completed. Architect will be ready for bids in about ten days.

Church, Pittston, Pa., \$15,000. Architects, Morris & McHale, Burr Building, Scranton, Pa. Owners, Immaculate Conception R. C. Church, care of Rev. J. J. Cox, Pittston, Pa. Frame, 1 story and basement, 39x81 feet, slate roof, steam heating, electric lighting. Contract awarded to Michael Maginillo, Pittston, Pa.

Hospital, Malvern, Pa., \$18,000. Architect, private plans. Owners, Rush Hospital, Malvern, Pa. Frame, 1 story, 200x16 feet and 16x50 feet, shingle roof, pine and composition floors, hot water heating, electric lighting. Contract awarded to F. E. Wallace, 1220 Chancellor street, Philadelphia.

New Jersey Construction News

Quarters for Marine Detachment and Naval Radio Station, Spce. 3126, near Tuckerton, N. J. Architect, private plans. Owners, U. S. Government, care of De Witt C. Webb, Navy Yard, Philadelphia. Wood, 1 story, 35x51 feet, ready roof, electric lighting. Lowest bidders: Wark-Yardley Co., 1737 Filbert street, \$21,820, 60 days; C. W. Mathis Co., Tuckerton, N. J., \$21,880, 90 days; Lam Building Co., 1001 Wood street, \$22,529, 90 days.

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York Branch. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete, 85 feet long, waterproofing. Owners taking bids, due July 12th. A. L. Carhart, Penfield Building, is figuring.

Administration Building, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Brick, steel, concrete and terra cotta, 3 stories, 224x44 feet, asbestos roof, maple floors, metal window guards. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

Miscellaneous Construction News

U. S. Naval Hospital, Reservation Emergency Hospital Buildings (4), Norfolk, Va., Spec. 3070. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, Washington, D. C. Frame, brick and reinforced concrete, 1 story, various sizes, slate and ready roof, cement and wood floors, concrete foundations, electric lighting, steam heating, rolled steel sash and skylights, iron stairs, hollow tile, metal lath, roof ventilators, metal window guards, waterproofing. Lowest bid submitted by John Finn & Son, Chicago, Ill., \$1,392,000.

Houses (85), Naval Housing Ordnance, S. Charlestown, W. Va. Architects, Godley, Haskell & Sedgwick, 244 Madison avenue, New York City. Owners, Bureau of Industrial Housing and Transportation, Washington, D. C. Brick and stucco, 2 stories, various sizes, slate and composition roof, ranges, electric lighting, pine floors. Owners have received bids.

Hay Shed, Wilmington, Del. Architect, Roscoe C. Tindall, 914 Orange street, Wilmington, Del. Owner, Philip Thompson, Wilmington, Del. Frame, 2 stories, tin roof. Plans in progress.

Moving Picture Theatre, Newcastle, Del., \$10,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, John C. Tobin, Wilmington, Del. Brick (fireproof construction), limestone trimming, 1 story and basement, 30x100 feet, slag roof, steam heating, electric lighting, tile and terrazzo work, concrete floors. Owner taking sub-bids.

Residence (alts. and add.), Ninth and Franklin streets, Wilmington, Del. Architect, E. C. May, Du Pont Building, Wilmington, Del. Owner's name withheld. Interior alterations, 3 stories, steam heating, electric lighting, hardwood floors, painting, plumbing, decorating and stairways. Architect taking bids. A. S. Reed & Bro., Wilmington, Del., are figuring.



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Factory, Hudson and Boston streets, Baltimore, Md. Engineer, N. M. Loney, 120 Broadway, New York City. Owners, American Can Co., 120 Broadway, New York City. Reinforced concrete, 3 stories, 105x176 feet, slag roof, composition and cement floors, metal lath, elevators, safety treads, metal window guards, tile work, rolling steel and kalamain doors (heating and lighting reserved). Owners taking bids. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 3, 1918.—Sealed proposals will be opened in this office at 3 P. M., July 31, 1918, for the construction of the United States assay office at New York, N. Y. The work includes deep foundations, safety vaults, and certain mechanical equipment. Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 731, United States Customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 3, 1918.—Sealed proposals will be opened in this office at 3 P. M., July 31, 1918, for the construction of entrances for three safety vaults and furnishing certain vault lining and infusible metal alloy shapes for the United States assay office at New York, N. Y. Drawings and specifications may be obtained from the supervising chief engineer, room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Permits for New Buildings

Garage, 909-11 Bainbridge street, Philadelphia, \$1,900. S. Dagostino (O), 624 South Ninth street, Philadelphia. Louis Swerdloff (C), 228 South Fifty-ninth street, Philadelphia. Brick, 1 story, 39x24 feet, stone foundations, slag roof.

Garage, Seventy-first and Elmwood avenue, Philadelphia, \$300. Alfonso Fox (O and C), 7100 Gray's avenue. Brick, 1 story, 22x22 feet, slag roof.

Garage, Ninth and Luzerne streets, Philadelphia, \$3,000. J. T. Clasby (O and C), 4335 North Ninth street. Stone, 1 story, 132x90 feet, stone foundations.

Store, northeast corner Second and Monroe streets, Philadelphia, \$3,500. Mrs. F. Magid (O), 727 South Second street. M. Barkan (C), 927 Snyder avenue. Brick, 3 stories, 16x60 feet, slag roof, hot water heating.

Residences (2), Vincent, east of Oakley street, Philadelphia, \$6,000. Michael Stevens (O and C), 910 Fanshawe street. Brick, 3 stories, 14x22 feet, slate roof, hot water heating.

Offices and Stores, Broad and Spruce streets, Philadelphia, \$3,000. Kahn & Greenberg (O and C), Morris Building. Brick, 1 story addition, 20x24 feet.

Alterations and Additions

Building, 7109 Ridge avenue, \$500. James Hoffman (O), on premises. W. K. Colleyer (C), 2209 North Twenty-ninth street. Frame, 1 story, tin roof, 16x10 feet.

Building, Seventy-eighth avenue, south of C street, Philadelphia, \$300. Mrs. Mary Harberger (O and C), on premises. Fire repairs.

Store and Dwelling, 2128 Dickinson street, Philadelphia, \$450. A. Brown (O), on premises. F. C. Dillon (C), 1223 South Twentieth street, Philadelphia. Flush bulks.

Dwelling, 1632 North Fifteenth street, Philadelphia, \$400. L. M. Wald (O), on premises. John Newborn (C), 1731 North Eighth street, Philadelphia. Interior alterations.

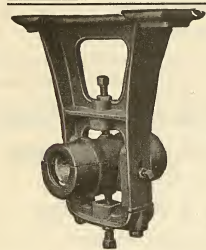
Store and Dwelling, 1106 West Girard avenue, Philadelphia, \$300. Miss Emile Schmidt (O), 1006 Girard avenue, Philadelphia. F. I. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. Interior alterations, new flush windows.

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phia. J. L. Lipschutz (O), on premises. Davis & Clayton (C), 1819 North Twentieth street. Brick, 1 story, 10x56 feet, skylights, wood floors, alterations.

Store, 1401 South Thirteenth street, Philadelphia, \$600. D. I. Poppine (O), 1211 Wharton street, Philadelphia. Leonardi Bros. (C), 1415 South Thirteenth street, Philadelphia. New hot water heating system.

Store, 1200 Market street, Philadelphia, \$500. Bedell Co. (O), on premises. C. Hamburger (C), 139 Emerson Place, Brooklyn, N. Y. Flush bulks.

Dwelling, 444 Diamond street, Philadelphia, \$300. Charlotte Schneider (O), 1023 Ridge avenue. John A. Cordori (C), 1235 Arch street, Philadelphia. Repairs.

Greenhouse, Twenty-second and Diamond street, Philadelphia, \$3,000. J. J. Habermehl (O and C), on premises. Glass, wood and iron.

Store and Dwelling, Ninth and Washington avenue, Philadelphia, \$500. D. Tirci (O), 807 South Eleventh street. A. Pastine (C), 1408 Reed street, Philadelphia. Alterations.

Dwelling, 1803 Church street, \$1,200. M. Hurst (O), 4307 Walnut street, Louis Ahlers (C), 4438 Salmon street, Philadelphia. Brick, 1 story, stone foundations, kitchen, 10x14 feet.

Dwelling, 1323 South Sixteenth street, \$300. Tony Andisse (O), on premises. M. Iovachini (C), 2227 Moore street. Stone foundations, 9x16 feet.

Dwelling, 1344 South Sixteenth street, \$300. John Hitchcock (O), on premises. M. Iovachini (C), 2227 Moore street. Two-story addition, 11x9 feet, brick, slag roof, stone foundations.

Garage, 418 South Fifty-sixth street, Philadelphia, \$500. H. Yacowhin (O), 418 South Fifty-sixth street. A. Dadonik (C), 45 South Sixtieth street. Brick, 1 story, 15x16 feet, slag roof, stone foundations.

Dwelling, 511 South Fifth street, Philadelphia, \$1,000. Morris Liebman (O), on premises. Nathan Litman (C), 2030 South Fifth street, Philadelphia. Repair fire damages, general alterations.

Factory, 115 North Seventh street, Philadelphia, \$515. Jacob J. Seeds & Son Co. (O), 115 North Seventh street. Wm. F. Ritz (C), 34 South Second street, Philadelphia. Low pressure steam heating boiler.

Boiler Room, Ruffner and Donath streets, Philadelphia, \$1,000. Niles-Bement-Pond Co. (O), Hunting Park avenue and Blair street.

Uniflow Boiler Co. (C), 803 Harrison Building, Philadelphia. Brick, one-story addition, 36x35 feet.

Factory, 429 Moyer street, Philadelphia, \$500. National Fibre Stock Co. (O), on premises. Warren Bros. (C), 1113 Cherry street, Philadelphia. One story, 4x10 feet.

Manufacturing Building, 1938-40 Germantown avenue, Philadelphia, \$1,500. Successful Building and Loan Association (O), 1748 Frankford avenue, Philadelphia. Harry Rose (C), 1748 Frankford avenue, Philadelphia. General repairs.

Warehouse, York and Almond streets, Philadelphia, \$2,000. A. Rose & Son (O and C), 1747 Frankford avenue, Philadelphia. Repair roof.

Garage, 3640 Frankford avenue, Philadelphia, \$600. M. Elbinger (O), on premises. Thomas Duff (C), 4666 Wyoming avenue, Philadelphia. Alterations.

Machine Shop, Fourth street, between Federal and Washington avenue, \$45,000. Southward Foundry and Machine Company (O), Fourth and Washington avenue, Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Brick, 1 story, 55x129 feet.

Office, 621-23 Wood street, Philadelphia, \$1,000. Charles Lawser (O), Seventh and Wood streets, Philadelphia. Wark-Yardley Co. (C), 1737 Filbert street, Philadelphia. Brick, 1 story, 21x24 feet.

Dwelling, 1917 South Seventh street, Philadelphia, \$450. F. Caskey (O), on premises. Toll Bros. (C), 512 Reed street, Philadelphia. Brick, one-story addition, 12x15 feet, stone foundations, slag roof.

Dwelling, 1314 South Fourth street, Philadelphia, \$350. Sol Kaplan (O), 1308 South Fourth street, Philadelphia. Abe Berg (C), 1326 South Leithgow street, Philadelphia. Brick, one-story addition, 11x6 feet, slag roof.

Mill Building, 509 South Tenth street, Philadelphia, \$1,000. Charles Enu Johnson Co. (O and C), on premises. Brick, two-story addition, 20x19 feet slag roof, skylights.

Rooming House, 1693 North Fifteenth street, Philadelphia, \$400. M. Kelley (O), on premises. Harry G. Evans (C), 1417 North Warneck street, Philadelphia. Alterations.

Garage, 2023 North Twenty-second street, Philadelphia, \$385. A. C. Adams (O), on premises. Walter Garrett (C), 4940 Parrish street, Philadelphia. Brick, 1 story, stone foundations, 12x22 feet.

Dwelling, 605 Sixty-sixth avenue, Oak Lane, Philadelphia, \$600. John A. Dexter (O), on

premises. C. Keefer & Son (C), 1321 Rodman street, Philadelphia. Repair fire damages.

Dwelling, 3701 Hoffman street, Philadelphia, \$300. James C. Enburg (O), on premises. LeRoy K. Smith (C), 4007 Chester avenue, Philadelphia. Alterations.

Foundry, Ruffner and Donath streets, Philadelphia, \$20,000. Niles-Bement-Pond Co., Nineteenth and Hunting Park avenue, Philadelphia. Austin Co. (C), Bulletin Building, Philadelphia. Brick, 1 story, concrete foundations, 63x119 feet.

Power House, States Road and Robbins street, Philadelphia, \$4,500. Commercial Products Co. (O), 6818 North Broad street, Philadelphia. Anton Ahlers (C), 3425 Howell street, Philadelphia. Brick, 1 story, 30x60 feet, slag roof.

Store Building, 3105 Kensington avenue, Philadelphia, \$300. Thomas Hughes (O), on premises. Roland Ball (C), 3128 Reach street, Philadelphia. Alterations.

Iron Storage Shed, Wheatsheaf and Sepviva street, \$500. (O), American Engineering Company, Aramingo and Cumberland. (C), P. Halbach Construction Company, 1261 North Twenty-sixth street. Frame, 27x30 feet, slag roof, 1 story.

Dwelling and Store, 1646 North Third street, \$800. (O), J. Gunterman, 1646 North Third street. (C), Otto Multy & Son, 2108 North Lawrence. Alterations.

Garage, Eleventh street south of Cheltenham ave., \$400. (O), Chas. F. Heinle, on premises. (C), F. L. Myers, 5818 Hasbrook avenue. Frame, 12x26, cement floors.

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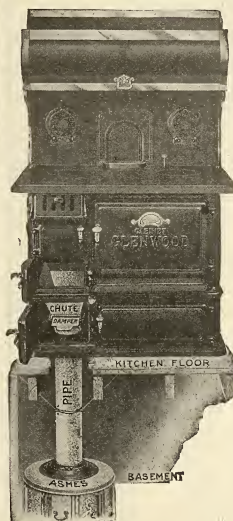
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Interest Earned Uncollected 148,151.79
Due from Banks 14,213,538.47
Cash and Reserve 4,931,189.91
Exchanges for Clearing House 2,809,027.10

\$70,741,569.24

LIABILITIES

Capital \$1,000,000.00
Surplus 3,250,000.00
Undivided Profits 945,074.75
Discount and Interest Unearned 137,893.56
Letters of Credit and Acceptances 735,588.07
Rediscounts at Federal Reserve Bank Secured by Government Bonds 2,962,885.00
Deposits 61,710,127.86

\$70,741,569.24

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Reserve for Losses - - -	4,419,000.00
Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
Losses Paid Since Organization - - -	192,518,273.33

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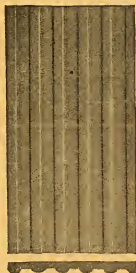
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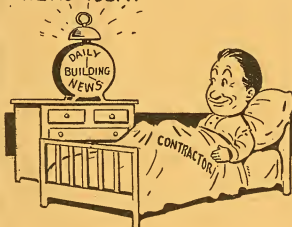
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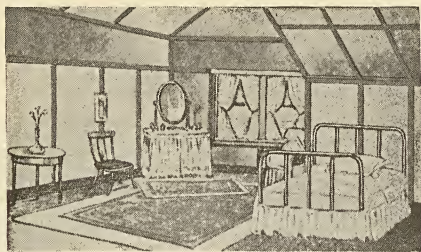
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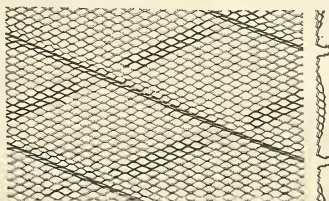
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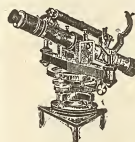


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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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As The Editor Sees It



THE semi-annual building report published last week in THE GUIDE was not very encouraging, but to offset the statistics we have only to review the results accomplished during the past few months by the building industries in their efforts to render service to the Government in winning the war.

We were made to realize some time ago by the experience of England and France that building can only be deferred, not eliminated.

From our own experience we know that the building industry, as a producer of enduring wealth, is essential to the nation for the successful pursuance of the war.

Since the meeting of representatives of building industries held last month in New York, when resolutions were adopted providing for the National Organization of the Building Industries and for the appointment of a committee to take the necessary action to bring this about, the outlook has been much brighter and co-operation and sympathy between the Government and the building industries seems assured.

Urging the importance of this movement, William B. King, of Washington, D. C., General Counsel of the National Association of Master Builders said:

"While the war was raging and before the United States took part it was reported to us through many sources that the Germans had no fear of America getting into the war because America was 'after the dollar.' So long as they can

pursue and catch the dollar they will not care what happens on this side of the Atlantic. Whatever we may do they will not take the trouble to resent it."

"But after a time America did resent it, and to-day America is being felt in that conflict. We hope that within a year the force brought to bear by America will terminate the war to the salvation of the democracy of the world.

"So to-day we do not need to defend our patriotism. I have no apology to make for favoring organization because I favor it in the interest of patriotism. It looks forward to the future of the country after the war and strengthens the country during the war.

* * *

"What can we do in the name of patriotism by this organization? First, we can unitedly place the resources of the building industry at the disposal of the Government for direct service during the war. This is the second largest industry in the country. Much of its resources and many of its men are engaged in supplying governmental needs. The Government is the greatest builder in the country, and we can give assistance and find out what service ought to be rendered by the industry. That is the first and direct help which we can give.

"There is another thing we can do. We all know that disturbances occurred in the industry as a result of the war. Just so far as disturbances to an industry can be avoided just to that extent

shall we justify the existence of our organization.

"Secretary McAdoo says that we must save money, and in order to save money we must make money. We must, as far as possible, prevent disturbances to the industry, and we must, so far as possible, preserve it because it is only by continuing the building industry that we can produce the money with which to buy bonds and support the many volunteer associations which need the money. We are doing a patriotic duty if we can create an organization that will point out just what disturbance of the industry is necessary and just where and how that disturbance can be stopped.

"The British and French people are proud that, notwithstanding the disturbance of their industries and the diversion to the war of their men and their money, their factories are at work. So must we keep our industries working just as far as consistent with war needs. It will be the part of a central committee representing this industry to point out how building business can be fostered to the greatest possible degree.

"Some day the war will cease and our men will be called back; then the wheels of industry must turn round. This nightmare of war will pass away and the dawn will break. Then let us be prepared for the labor of the coming day. Let us not find our industries demoralized and impossible to early rescue. Let us do our part to conserve the peace organization of the building industry of this country

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as much as we can so that when peace comes there may not be a long period of depression.

"Is there wisdom among the building men of the United States to carry out these objects? Men who can say to the Secretary of the Treasury: 'This will help the country; that will hurt the country.' I believe there is wisdom and judgment enough among us to appoint a committee that will be favorably received by the Government.

"I believe that if we had had an organization represented at Washington since the beginning of the war we should have had millions of dollars more business going on.

"It is such service that I believe we can render, and at this time we should take some definite, forward steps looking to a federation and to the appointment of a committee to look after our interests during the war; and it may be that we are laying the foundation for a permanent organization of the industry, which will continue after the war to the benefit of the business in which we are all engaged."

That this sort of organization is a most important step in the right direction and one that the Government welcomes is best shown by Mr. McAdoo's own words, in a speech before the Chicago Association of Commerce. He said:

"You gentlemen come to Washington because there is something the matter with, for example, the shoe business. You hire a lawyer at \$25,000 a year who doesn't know a thing about the shoe business and he opens a law book to see what the law is, but I merely want to know the truth about the shoe business; the law is not involved. It is a question of fact about your particular business."

Further evidence of the harmony existing between the Government and the building trades are the recent conferences between Government officials and basic building material manufacturers in Atlantic City and Pittsburgh. The fact was apparent at these conferences that the Government desires as little curtailment of the building industry as possible during the war, and in order to reach a more complete understanding of these matters the Building Industry of New York, representing virtually all the building and allied organizations in the East, held a conference with Federal officials at Atlantic City on July 15th.

These conferences are of the utmost moment in view of existing conditions regarding building materials. Since the beginning of the war the Germans have been raiding the industrial plants of Belgium and of northern France, and in many cases have taken parts of the structures themselves where they have had fabricated steel frames. At the present time

America is the only country producing building materials suitable for modern construction, so that it now devolves upon this country to supply the entire world with reconstruction materials, so that it is evident that any further curtailment of basic building production in this country will seriously affect the war-winning program and the world-reconstruction program which is already under way.

We can best demonstrate the great reconstruction responsibility which will fall upon America's shoulders by an appeal from Harry A. McBride, United States Consul at London, to American building material producers, to get in touch with the Comptoir National pour le Reprise de

l'Activite Economique en Belgique, 110 Cannon Street, London, E. C., to supply materials for the reconstruction of Belgium, among the list of articles being "materials for construction of buildings, farming implements, wood-working machines, electrical material, refractory materials and labor-saving machinery."

American materials and machinery are to be used also in the industrial expansion and housing development of Norway and there is every assurance that large credit will be placed at the disposal of both France and Italy for the purchase of American building materials and labor-saving machinery to offset the loss of man-power.

THE PLUMBER APPRECIATED

"Did you ever," said he, "know a plumber who had grown rich?"

We stood in the kitchen. Outdoors it was a wonderful winter morning, snow-white and sparkling, felt rather than seen through frosted windows, for the mercury last night had dropped below zero, and, although reported on the way up, was not climbing with real enthusiasm. On the floor was a little sea of water, in shape something like the Mediterranean, with Gibraltar out of sight under the kitchen sink. The stove (unfortunately) had been lighted; and a strange, impassive boy stood beside it, holding in pendant hands various tools of the plumber's craft. The plumber stood in the Mediterranean. And I, in my slippers and bathrobe,—a foolish costume, for the sea was not deep enough to bathe in,—hovered, so to speak, on the edge of the beach.

I suppose I wished to impress this plumber with my imperturbable calm. Upset as I was, I must have realized the impossibility of impressing the boy. Swaggering a little in my bathrobe, I had said something joacular, I do not remember just what, about the rapid accretion of wealth by plumbers. He lit his pipe. "Did you ever," said he, "know a plumber who had grown rich?"

Now, until that winter, I had never thought of the plumber as a man in many respects like myself. One may winter for years in a city apartment without meeting a plumber, but hardly without reading a good many humorous trifles about them in current literature; and my idea of this craftsman had been insidiously formed by the minor humorist. Summer, in my experience, had been a plumberless period, in which water flowed freely through the pipes of my house, and gushed obligingly from faucets at the touch of a finger. It was like an invisible brook; and like a brook, I thought of it (if I thought of it at all) as going on forever. Nothing worse happened than a leak at the faucet. And when that happens I can fix it myself. All it needs is a new washer.

I run down cellar and turn off the water. I

run up from the cellar and take off the faucet. I put in the new washer which is like a very fat leather ring for a very thin finger, and screw on the faucet. I run down cellar, turn on the water, run up from the cellar, and look at the faucet. It still leaks. So I run down cellar, turn off the water, run up from the cellar, take off the faucet, make some slight alteration in the size, shape, or position of the washer, put on the faucet, run down cellar, turn on the water, run up from the cellar, and look at the faucet. If it still leaks (as it is rather to be expected), I repeat as before; and if it then leaks (as is more than like), I run down cellar, turn off the water, run up from the cellar, take off the faucet, make some slight alteration in the size, shape or position of the washer, put on the faucet, run down cellar, turn on the water, run up from the cellar, and look at the faucet. Perhaps it leaks more. Perhaps it leaks less. So I run down cellar—and turn off the water—and run up from the cellar—and take off the faucet. Then, talking aloud to myself, I take out the new washer, throw it on the floor, stamp on it, kick it out of the way, put in another new washer, put on the faucet, run down cellar, turn on the water, run up from the cellar, and look at the faucet. If (and this may happen) it still leaks, I make queer, inarticulate, animal noises; but I run down cellar, turn off the water, run up from the cellar, and take off the faucet. Then I monkey a little with the washer (still making those queer animal noises), put on the faucet, run down cellar, turn on the water, run up from the cellar, and look at the faucet. Sooner or later the faucet always stops leaking. It is a mere matter of adjusting the washer; any handy man can do it with a little patience.

Winter in the country is the time and place to get acquainted with the plumber. And I would have you remember, even in that morning hour when the ordinary life of your home has stopped in dismay, and then gone limping toward breakfast with the help of buckets of water generously loaned you by your near-

(Continued on Page 423.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

General Store House, Small Arms Ammunition Store House, Cart House, Removal and Reconstruction of Present Carriage and Store House, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Brick, reinforced concrete and terra cotta, 3 stories, 210x61 feet; 2 stories, 107x36 feet, and 1 story, 147x35 feet, slag and slate roof, cement floors, hollow tile, metal lath, elevators, safety treads, roof ventilators, waterproofing, wire work. Owners taking bids, due July 25th. Barclay White & Co., 1713 Sansom street; Wm. R. Dougherty, 1610 Sansom street; Ketchum & McQuade, 1029 Brown street, and Irwin & Leighton, 126 N. Twelfth street; F. W. Van Loon, Denckla Building; W. W. Astino & Co., 1213 Filbert street; Cramp & Co., Denckla Building; Warren-Moore Co., Colonial Trust Building; Stacy Reeves & Sons, 2011 Market street; John R. Wiggins & Co., Otis Building, and John N. Gill & Co., Otis Building; A. R. Raff Cont. Co., 1635 Thompson street; Roydhouse-Arey Co., Fidelity Building, are figuring.

Women's Comfort Station (Finishing Machine Shop), Women's Comfort Station (Rough Machine Shop), Men's Toilet and Wash Room (Finishing Machine Shop), Men's Toilet and Wash Room (Rough Machine Shop), Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel Co., Widener Building, Philadelphia. Brick, steel and reinforced concrete, 1 story, 29x14 feet, 42x14 feet, 20x15 feet and 36x17 feet, slag roof, steam heating, electric lighting. Owners taking bids, due as soon as possible. Warren-Moore Co., Colonial Trust Building; Irwin & Leighton, 126 North Twelfth street; F. Mark Cont. Co., Finance Building, and Barclay White Co., 1713 Sansom street; Cramp & Co., Denckla Building, are figuring.

Electric Station, Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel Co., Widener Building, Philadelphia. Brick, steel, glazed terra cotta coping, 1 story, 120x53 feet, gypsum slab and slag roof, reinforced concrete floors, safety treads, iron stairs. Owners taking bids, due as soon as possible. Warren-Moore Co., Colonial Trust Building; Irwin & Leighton, 126 North Twelfth street; F. W. Mark Cont. Co., Finance Building, and Barclay White Co., 1713 Sansom street; Cramp & Co., Denckla Building, are figuring.

Garage and Service Building, northeast corner of Watts and Cambridge streets, Philadelphia. Architect, Le Roy K. Rothschild, Bulletin Building, Philadelphia. Owner, Murray White, Morris Building, Philadelphia. Brick, 1 story, 48x94 feet, slag roof, cement floors, concrete foundations, steam heating, electric lighting. Architect taking bids, due July 19th. Lam Building Co., 1001 Wood street; Stacy Reeves & Sons, 2011 Market street; Davis &

Clayton, 1817 North Twentieth street, and D. Greenwood, 1509 Wood street, are figuring.

Bank (add.), Germantown avenue and Air-drie street, Philadelphia. Architect, Philip H. Merz, Pennsylvania Building, Philadelphia. Owners, North Philadelphia Trust Co., on premises. Brick and limestone, 3 stories, 20x110 feet, concrete and slag roof, steam heating, electric lighting, cement floors, hollow tile, metal lath. Architect taking bids, due July 30th. A. R. Raff Cont. Co., 1635 Thompson street; H. P. Schneider, 3713 Old York Road, and Wm. Steele & Sons Co., Sixteenth and Parkway; Stokes Bros., 6/23 Musgrave street; John R. Wiggins Co., Otis Building; Nicholas Cannon, 3029 North Twenty-second street, are figuring.

Residence and garage, Ogontz avenue and Limekiln Pike, \$15,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Harry Kaemmerle, Morris Building, Philadelphia. Stone, 2½ stories, 40x30 feet, wing 12x12 feet, shingle or slate roof, hardwood floors, stone foundations, hot water heating, electric lighting, tile and marble work. Plans about completed. Owner will take bids in ten days.

Stable (alts.) to Garage, 4806 Wayne avenue, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Angelo Pasquarello, on premises. Stone and brick, 1 story, changing stable 60x60 feet into garage 60x120 feet, slag roof, cement floors, electric lighting, hollow metal skylights, roof ventilators, gasoline storage system. Architect taking bids, due as soon as possible. John Roman, 4521 Pulaski avenue; T. J. Carberry, Heed Building, and Nardi Co., Bulletin Building, are figuring.

Fire Escape, Broad and Jefferson streets, Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street. Owners, Benj. Teller Memorial School, on premises. Terra cotta, metal frame, automatic dropladder, wire glass, cement floors, painting. Architects have received bids.

Gun Plant, Roberts avenue and Juniata street, Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel and Ordnance Co., Nicetown, Philadelphia. Steel, brick, reinforced concrete, terra cotta coping, 1 story, slag roof, concrete and wood blocks, steam heating (electric work reserved), rolled steel sash, kinnear doors, metal lath, safety treads, waterproofing, iron stairs. Finished Machine Shop and Half Yard Runway, 562x183 feet; Rough Machine Shop, 482x114 feet; Heat Treatment Plant, 460x74 feet. Owners taking bids, due July 17th. F. W. Mark Cont. Co., Finance Building; Barclay White & Co., 1713 Sansom street; Irwin & Leighton, 126 North Twelfth street; Warren-Moore Co., Colonial Trust Building, are figuring.

Hospital (alts.), 524 Spruce street, Philadelphia. Architect, LeRoy B. Rothschild, Bulletin

Building, Philadelphia. Owners, Jewish Maternity hospital, on premises. Consist of general alterations. Plans completed. Architect ready for bids.

Stores and Apartments, 1213-15 East Cheltenham avenue, Philadelphia. Architect, LeRoy B. Rothschild, Bulletin Building, Philadelphia. Owner, S. Goldfarb, 1201 East Cheltenham avenue, Philadelphia. Brick, 2 stories and basement, 40x60 feet, slag roof, maple floors, steam heating, electric lighting, tile work, hollow metal skylights, flush bulks, metal ceilings. Architect taking bids. I. A. Dunkelberger, 71 East Herman street; Thos. J. Carberry, Heed Building; Davis & Clayton, 1817 North Twelfth street, Philadelphia, are figuring.

Store and Oil House, Master Mechanics' Office, Tulip and Somerset streets, Philadelphia. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market sts., Philadelphia. Brick, steel, reinforced concrete, terra cotta coping, 1 story, 39x27x84½ feet, and 2 stories, 18½x38½ feet, concrete foundations, asbestos, asphalt and slate roof, granolithic and asphalt mastie floors, steam heating, electric work, metal lath, rolled steel sash, fire doors, elevators, concrete walls, concrete inspectors' pit, ornamental iron work, iron stairs. Owners taking bids, due July 23rd. F. W. Van Loon, Denckla Building; A. L. Carhart, Penfield Building; Pringle Borthwick, 8018 Germantown avenue; H. E. Baton, 1713 Sansom street; F. A. Havens & Co., 845 N. Nineteenth street; Robert E. Lamb Co., 843 N. Nineteenth street; F. W. Mark Cont. Co., Finance Building, and Wm. R. Dougherty, 1610 Sansom street, are figuring.

Store Building (alts.), 44 N. Eighth street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street. Architect taking bids. Lam Building Co., 1001 Wood street, and Smith-Hardiean Co., 1606 Cherry street, are figuring.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

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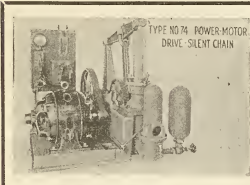
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Garage (alts. and add.), 1202-10 North Franklin street, \$15,000. Architect, private plans. Owners, Wm. Bechtold & Co., on premises. Brick, 1 story, new front, steam heating, cement floors. Contract awarded to George Kessler Cont. Co., Drexel Building, Philadelphia.

Fire Escapes, 2100-02-04-06 Chestnut street, Philadelphia. Architects, Harris & Richards, Drexel Building, Philadelphia. Brick and stone, 4 stories, tin roof, electric lighting, fire and kalamein doors, hollow metal sash, safety treads, fire doors, fire escapes, metal lath, ornamental iron work. Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Box and Packing Shop, 25,112 Frankford Arsenal, Philadelphia, \$200,000. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Concrete, steel and brick, 83x122 feet, slate and slag roofs, concrete and maple floors, hollow tile, metal lath, elevators, roof ventilators, waterproofing, wire work, electric lighting, rolled steel sash, fire and kalamein doors, ornamental iron work. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, Philadelphia.

Rooming House (int. alts.), Eighteenth and Ridge avenue, Philadelphia. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owners, Ridge Avenue Farmers' Association, on premises. Brick, 4 stories, 46x56 feet, tile work, plumbing, electric light and fixtures, fire tower, cement work, new partitions general repairs. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street, Philadelphia.

Buildings (alts. and add.), Twenty-sixth and Spruce streets, Philadelphia. Architects, Day & Zimmerman, 608 Chestnut street, Philadelphia. Owners, Vulcan Mills, Cleveland Worst-Ed Co., Allegheny avenue and Emerald street,

Philadelphia. Consists of new office building, brick, 1 story, 24x30 feet, slag roof, 2 fire towers, brick, rearranging toilet rooms, plumbing, 1 freight elevator. Contract awarded to F. A. Havens Co. 845 North Nineteenth street, Philadelphia.

Extension to Aircraft Factory Transformer House, Navy Yard, Philadelphia, \$9,642, 75 days. Architect, private plans. Owners, U. S. Government, care of DeWitt C. Webb, Public Works, Navy Yard. Brick and steel, 1 story, 30x52 feet, slag roof, concrete floors, roof ventilators. Contract awarded to Thomas Reilly, 1616 Thompson street, Philadelphia.

Store Front and Add., 2823 Girard avenue, Philadelphia, \$2,000. Architect, private plans. Owner, Gustav G. Leins, 2834 Girard avenue. Brick, 1 story, 9x16 feet, flush bulks. Contract awarded to Wm. Koelle & Co., Twenty-sixth and Oxford streets, Philadelphia.

Foundry, Jenks and Bath streets, Philadelphia, \$20,000. Architect, private plans. Owners, Pennsylvania Forge Co., on premises. Steel, 1 story, irregular size, concrete foundations. Contract awarded to Wm. F. Donley Co., Baxter Building, Philadelphia.

Theatres (2), Fifty-second and Market sts. and Germantown avenue and Tulpehocken at, Philadelphia, \$4,000. Architect, private plans. Owners, Greater Philadelphia Amusement Co. (Nixon), Fifty-second and Market streets, and Fred D. Nixon-Nirdliner (Colonial), 320 S. Forty-sixth street, Philadelphia. Consists of interior alterations, carpentry and plastering. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

Crane Shed, Building and Extra Siding, 907-35 North Ninth street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, Keystone Supply and Manufacturing Co., 921 North Ninth street, Philadelphia. Brick, steel, concrete and corrugated iron, 3 stories, 154x100 feet, composi-

tion roof, cement floors, stone foundations, elevators, rolled steel skylights, fire doors, ornamental iron work, wire work (elevator, electrical work and heating reserved). Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Office Building, Marcus Hook, Pa. Architect, W. A. Courtenay, Jr., Marcus Hook, Pa. Owners, Sun Company, Marcus Hook, Pa. Brick, steel and fireproof terra cotta, 2 stories, 81x65 feet, slag roof, cement floors, steam heating, electric lighting, terrazzo floors, rolled steel sash and skylights, metal doors, metal lath, safety treads, roof ventilators, metal window guards, waterproofing and dampproofing. Contract awarded to Barclay White & Co., 1713 Sansom street, Philadelphia.

Rebuilding Outside Walls, northeast corner of York Road and Callowhill street. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owner, John F. Betz, 3rd, care of agents, Continental Title and Trust Co., Twelfth above Chestnut street, Philadelphia. Brick, plastering, painting, metal lath. Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Pennsylvania Construction News

Cow Barn, Creamery and Retaining Wall, etc., Spring City, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, Board of Trustees of the State Institute for Feeble-Minded of Eastern Pennsylvania, Spring City, Pa. Concrete and hollow tile, 2 stories, 108x36 feet, and 2 wings 33x36 feet, and 2 stories, 51x36 feet, asbestos shingle roof, cement, cork and brick floors, steam heating, electric lighting, concrete foundations, hollow tile, metal lath, dampproofing and waterproofing, iron work, freight elevators, roof ventilators. Architect taking bids, due July 24th. W. W. Anstine & Co., 1218 Filbert street; Roydhouse-Arey Co., 112 North Broad street; Philadelphia, additional bidders.

Factory, Edgely, Pa. Architect, H. A. Hill, Trenton, N. J. Owner, Wm. Woodhouse, 835 West State street, Trenton, N. J. Brick, 1

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story, 180x40 feet, slag roof, electric lighting. Owner is taking bids.

Residence (alts. and add.), Phillipsburg, Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, H. B. Scott, Phillipsburg, Pa. Sketches drawn. Too early for details.**Garage and Farm Building (rebuilding)**, Elkins Park, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Howard A. Loeb, Elkins Park, Pa. Stone, 2 stories, 27x33 feet and 67x27 feet, slate roof, cement floors (heating and electrical work reserved). Architects taking bids. Jos. Ashby, Second Street Pike; Specht & Sperry, Heed Building; Wm. R. Dougherty, 1610 Sansom street; Fred Elvidge & Son, 5522 Germantown avenue, Wm. J. Grubler & Co., 219 East High street; W. John Stevens, Inc., Wyncoote, Pa., and Milton W. Young, Overbrook, Philadelphia, are figuring.**School**, Ardmore, Pa. Architects, Henon & Boyle, 10 South Eighteenth street, Philadelphia. Owners, St. Colman's R. C. Church, care of Rev. F. J. Purtell, Ardmore. Alterations to class rooms, partition studding, mill work, plastering, painting and glazing, blackboards (slate). Architects taking bids, due Friday, 19th. Smith-Hardican Co., 1606 Cherry street; John McShain, 1610 North street, and Bernard J. McKenna, 1927 West Somerset street, are figuring.**Pennsylvania
Contracts Awarded****Residence (alts.)**, Langhorne, Pa. Architect, private plans. Owner, Charles H. Moon, Woodbourne, Langhorne, Pa. Consists of interior alterations. Contract awarded to Wm. J. Grubler Co., 219 East High street, Germantown, Philadelphia.**Battery House**, Trenton Junction, Pa. Architect, private plans. Owners, Philadelphia and Reading R. R. Co., care of chief engineer, Twelfth and Market streets, Philadelphia. Brick, terra cotta trimming, 1 story, 35x18 feet, slag roof, granolithic floors, concrete foundations, roof ventilators. Contract awarded to Chas. C. Pace, Merion, Pa.**Schools (2)**, Lester and Essington, Pa., \$134,600. Architect, Clyde S. Adams, 1509 Arch street, Philadelphia. Owners, Lester School Board, Lester, Pa. Brick and stone, 2 stories, 85x102 feet. Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.**Garage**, Latham Park, Pa. Architect, Conrad P. Neff, Sixteenth and Sansom streets, Philadelphia. Owner, John E. Cochran, Latham Park, Pa. Frame and stucco, 1½ stories, 15x25 feet, slate roof, cement floor, electric lighting. Contract awarded to W. J. Stevens, Inc., Wyncoote, Pa.**Miscellaneous
Construction News****Laboratory**, New Haven, Conn. Architects, Day & Klauder, 923 Chestnut street, Phila-

delphia. Owners, Yale University, New Haven, Conn. Brick and concrete, fireproof, 4 stories and basement, 45 x96 feet, slag roof, steam heating, electric lighting, tile work, fire doors, iron stairs, cement and tile floors, hollow tile, metal lath, elevators, safety treads, roof ventilators, waterproofing. Architects taking approximate bids.

Residence, Sixteenth and Riverview, Wilmington, Del. Architect, E. Canby May, Dupont Building, Wilmington, Del. Owner, Thos. Kiteheon, care of architect. Brick, 2 stories, 18x39 feet, slag roof, hot water heating, electric lighting, hardwood floors (plumbing, heat-**ARTESIAN WELLS DRILLED****Test Borings
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ing and electric work reserved). R. C. Tindall & Son, 904 Tatnall street, Wilmington, Del., are figuring.

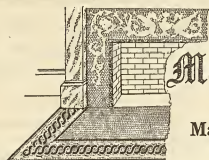
**NEW JERSEY
Construction News****Administration Building and Garage**, Camp Dix, Wrightstown, N. J. Architect, private plans. Owners, Jewish Welfare Workers, Camp Dix, N. J. Frame, 1 story, 47x57 feet, ready roof, pine floors, stone foundations, electric lighting. Frank E. Hahn, 1112 Chestnut street, Philadelphia, taking revised bids, due July 17th. Lam Building Co., 1001 Wood street; Smith-Hardican Co., 1606 Cherry street, and J. S. Rogers Co., Drexel Building, Philadelphia, are figuring.**Smoke Stack to Boiler House**, Jamesburg, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Boys' Home, care of Wm. Edmunds, Superintendent, Jamesburg, N. J. Brick, 125 feet high, steam heating from boiler house to different buildings. Owners ready for bids.**Boat House and Docks**, Cape May, N. J. Architect, private plans. Owners, Bureau of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 1 story, 176x50 feet, ready roof, electric light-

ing. Owners taking bids, due July 29th. Warkyardley Co., 1737 Filbert street, Philadelphia, is figuring.

School, Pennsgrove, N. J. Architect, H. A. Hill, 40 East State street, Trenton, N. J. Owners, Pennsgrove School Board, Pennsgrove, N. J. Brick, 1 story, 156x121 feet, 12 rooms, slate roof, concrete foundations, unit system of heating, electric lighting, yellow pine floors, roof ventilators. Plans in progress.**Parish House**, Trenton, N. J. Architect, Robt. Schmmam, 932 Lambert street, Trenton, N. J. Owner, Rev. E. Lucacini, 730 Cass street, Trenton, N. J. Brick, 2 stories, 40x23 feet, 8 rooms, slate roof, hot water heating, hardwood floors, electric lighting, tile work. Architect ready for bids.**Isolation Hospital**, Jamesburg, N. J., \$2,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Home for Boys, care of architect. Frame, 1 story, 30x18 feet, shingle roof, steam heating, electric lighting. Owners will build.**NEW JERSEY
Contracts Awarded****Sewage Disposal Plant**, Bordentown, N. J. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Normal Training and Industrial School for Colored Youths, Bordentown, N. J. Reinforced concrete and steel, 17x24 feet, 6 feet deep, pipe and terra cotta, waterproofing. Contract awarded to New York Sewage Disposal Co., 37 East Twenty-eighth street, New York City.**Reconstruction of Water System**, Skillman, N. J., \$14,000. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Village for Epileptics, Dr. Weeks, Superintendent, care of architect. Frame, 1 story, 28x20 feet, shingle roof. Contract awarded to W. J. Warren, Princeton, N. J.**Fire Escape (add.)**, Trenton, N. J. Archi-

tect, F. H. Bent, State Capitol, Trenton, N. J. Owners, Board of Managers, New Jersey State Hospital, Trenton, N. J. Concrete and steel, hollow metal sash and skylights, metal window guards, fire or kalamein doors, fire escapes, concrete floors. Contract awarded to Carl Poinsett, Trenton, N. J.

Pastourizing Plant, Morris Plains, N. J., \$4,690. Architect, F. H. Bent, State Capitol, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile and stucco, 1 and 2 stories, 24x36 feet, asphalt shingle roof, shower baths, steam heating, cement floors, iron angles. Contract awarded to J. J. Lyons, Morrisstown, N. J.**School (alts. and add.)**, Trenton, N. J. Architect, F. H. Bent, State Capitol, Trenton, N.**If you want Trap Rock or Slag, any size or grit, we are headquarters for same. DAVID FRANCE CO.,
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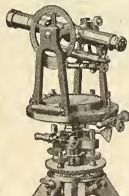
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J. Owners, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, wing 24x24 feet, steam heating. Contract awarded to Finemore & Firth, Bordentown, N. J.

School, Juliustown, Burlington County, N.

J. Architect, Harry Hill, Trenton, N. J. Owners, School Board of Juliustown Township, care of Frank Bozarth, clerk, R. F. D., Burlington, N. J. Frame, 1 story, 75x40 feet, pine floors, Waterbury heaters. Contract awarded to E. W. Asham, Mt. Holly, N. J.

MARYLAND Construction News

Parsonage, York Road, Govans, Baltimore, Md. Architect, John Freund, 11 East Lexington street, Baltimore. Owners, First English Lutheran Church, Govans, Md. Brick and stone, slate roof, hot water heating, electric lighting, tile work, hardwood floors. Architect taking bids. Hicks, Tase & Norris, Baltimore, Md., are figuring.

Dwellings (11), North Milton avenue, Baltimore, Md., \$10,000. Architect, private plans. Owners, Aeme Building Co., 511 Equitable Building, Baltimore. Brick, 2 stories, 13x42 feet, tin or slag roof, hot air heating, electric lighting, plastering. Owners are taking sub-bids.

Apartments (alts.), Thirty-second and Charles streets, Baltimore. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore. Owners, Allston Apartment Co., Union Trust Building, Baltimore. General interior alterations, mill work, electric work, tile work, painting, plastering, painting, plumbing and heating. Architects taking bids. Frairie Bros. & Haigley, and C. L. Stockhausen Co., Baltimore, Md., are figuring.

Residence (alts. and add.), 821 East Baltimore street, Baltimore, Md. Architect, Geo. R. Callis, Knickerbocker Building, Baltimore. Owners, S. Blaustein & Bro. Co., on premises. Brick, two-story addition, tile work, hollow metal skylights, plastering, painting and plumbing. Owners taking bids.

Mill (add.), Martinsburg, W. Va. Engineer, P. C. Keilholtz, Continental Building, Baltimore. Owners, Bursley Woolen Mills, Martinsburg, W. Va. Brick, steel and concrete, 4 stories, 60x130 feet, slag roof, steam heating,

electric lighting, electric elevator, fire escapes, steel sash, hollow metal skylights, roof ventilators, fireproofing, hollow tile, mill work. Plans in progress. Engineer and owners will take sub-bids on all lines.

Garages (48) Roseland Place, west of Poplar Grove street, Baltimore. Architect, private plans. Owner, S. J. Schmeunier, 1422 White-lock street, Baltimore. Brick, 1 story, slag roof, cement floors, electric lighting. Owner will take bids in a few days.

Warehouse, Parkersburg, W. Va. Architect, private plans. Owners, Standard Oil Co., care of Gen. Eng. Dept., Elizabeth, N. J. Steel and concrete, 2 stories, 57x101 feet, slag roof, hollow metal skylights, rolled steel sash, fire doors, dampproofing, hollow tile, iron work. Owners taking bids. Price Const. Co., Maryland Trust Building, Baltimore, Md., are figuring.

Maryland Contracts Awarded

Nurses' Home (alts.) (Boys' Home), northwest corner of Calvert and Pleasant streets, Baltimore, \$50,000. Architects, Baldwin & Pennington, 330 North Charles street, Baltimore. Owners, Mercy Hospital, Calvert and Saratoga streets, Baltimore. Alterations, new partitions, steam heating, electric lighting, fire escapes, hollow metal skylights, roof ventilators, stucco, tile, slate and terrazzo work, composition and hardwood floors, dumbwaiters, refrigerators, iron work. Contract awarded to

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 3, 1918.—Sealed proposals will be opened in this office at 3 P. M., July 31, 1918, for the construction of the United States assay office at New York, N. Y. The work includes deep foundations, safety vaults, and certain mechanical equipment. Drawings and specifications may be obtained from the Supervising Chief Engineer, Room 731, United States Customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 8, 1918.—Sealed proposals will be opened in this office at 3 P. M., July 31, 1918, for the construction of entrances for three safety vaults and furnishing certain vault lining and infusible metal alloy shapes for the United States assay office at New York, N. Y. Drawings and specifications may be obtained from the supervising chief engineer, room 731, United States customhouse, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Frairie Bros. & Haigley, 18 Clay street, Baltimore.

Ways (3), Sparrows Point, Md., \$1,000,000. Architect, private plans. Owners, Bethlehem Steel Co., on premises. Concrete piles and reinforced concrete work. Contract awarded to Atherthorn Const. Co., New York City.

Dwellings (5), Thirty-second street, between Calvert and Charles street, Baltimore. Architect, J. O. Singer, Jr., 600 Equitable Building, Baltimore. Owner, J. Gervig, 600 Equitable Building, Baltimore. Brick, 2 stories, stone trim, tin and slag roofs, hot water or hot air heating, combination lighting, mill work. Plans about completed. Owner will take sub-bids.

Dwellings (10), Ashburton avenue, near Garrison avenue, Baltimore. Architect, Geo. R. Morris, 530 Title Building, Baltimore. Owners, Northwestern Realty Co., 531 Title Building, Baltimore. Stone foundations, frame, 2½ stories, slate roof, pipeless hot air heating, combination lighting, hardwood floors. Architect is taking sub-bids.

Ordinance Depot, Curtis Bay Md., \$4,000,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Will consist of 30 powder magazines, 12 TNT magazines, docks, general storage warehouse and laying tracks. Contract awarded to Smith-Hausser & MacIsaac, New York City.

Training Camp, Curtis Bay, Md., \$4,000,000. Architect, private plans. Owners, U. S. Government, care of Cantonment Division, War Department, Washington, D. C. Accommodations for 11,000 men (Signal Corps), barracks,

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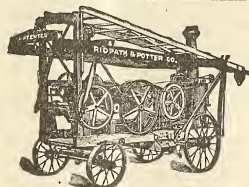
HEATING

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extension to hospitals, filtration plants, sewage system, frame, composition roofs, electric lighting, steam heating. Contract awarded to Smith-Hausser & MacIsaac, Inc., New York City.

Pier, between Second and Third avenues, Canton, Baltimore, Md., \$200,000. Architect, private plans. Owners, Standard Oil Co., care of Thos. Goodwillie, manager, on premises. Steel, hollow tile and concrete, fireproof, 550 feet long, 60 feet wide, 250 feet concrete bulkhead from wharf to warehouse. Contract awarded to Raymond Concrete Pile Co., 922 Munsey Building, Baltimore.



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Philadelphia

Dwellings (6), Nixon, north of Fountain street, Philadelphia, \$19,800. Philadelphia Paper Manufacturing Co. (O), Manayunk, Philadelphia. Barclay White & Co. (C), 1613 Sansom street. Brick, 2 stories, 16x29 feet, slag roof, hot air heating.

Garages, Jasper and Madison streets, Philadelphia, \$4,000. Margaret Shuttlesworth (O), 3054 Kensington street, Philadelphia. E. Irving Shuttlesworth (C), 3054 Kensington street, Philadelphia. Brick, 1 story, 60x35 feet, slag roof, concrete foundations.

Garage, 1310-18 North Fifth street, Philadelphia, \$11,000. I. Cohen (O and C), 1330 North Fifth street, Philadelphia. Brick, 75x190 feet.

Garage, Thirtieth and Cheltenham avenue, Philadelphia, \$1,000. W. J. Motz (O), on premises. H. Hopin (C), 6901 York Road, Philadelphia. Brick, 1 story, 12x19 feet, slag roof, stone foundations.

Garage, Howard and Thompson streets, Philadelphia, \$7,500. Paul Weiss (O), on premises. O'to Malz & Son, 2108 North Lawrence street, Philadelphia. Brick, 1 story, 50x80 feet.

ises. Harry Bobb (C), 3038 Agate street, Philadelphia. Brick, 1 story, 24x18 feet, stone foundations, slag roof.

Garage, 4828 North Thirteenth street, Philadelphia, \$900. Mary A. Lawler (O), on premises. M. Moister Co. (C), 3931 North Fifth street, Philadelphia. Iron on iron, 1 story, 16x48 feet.

Garage, 1324 Pike street, Philadelphia, \$1,500. Paul Fromm (O), on premises. M. Moister & Co. (C), 3931 North Fifth street, Philadelphia. Iron on iron, 1 story, 8x16 feet.

Garage, Aramingo and Huntingdon streets, \$370. John T. Lewis & Bro. Co. (O), on premises. M. Moister & Co. (C), 3931 North Fifth street, Philadelphia. Iron on iron, 1 story, 20x20 feet.

Dwelling, 2431 South Ninth street, Philadelphia, \$325. Wm. Lindale (O), 2338 South Broad street, Philadelphia. H. D. Prettyman (C), 2603 South Broad street, Philadelphia. Rebuild repairs.

Foundry, Ruffer and Donath streets, Philadelphia, \$7,000. Niles-Bement-Pond Co. (O), Twenty-first and Callowhill streets. Austin Co. (C), Bulletin Building, Philadelphia. Alterations.

Shop, Front street and Columbia avenue, Philadelphia, \$3,500. National Galvanizing Co. (O), on premises. Imperial Eng. Co. (C), East Walnut Lane, Philadelphia. Brick, 1 story, 35x85 feet.

Manufacturing Building, Fourth and Somerset streets, Philadelphia, \$400. Owen Osborne (O), Fourth and Somerset streets, Philadelphia. Barnes Bros. (C), 2080 East Willow street, Philadelphia. Brick, slag roof, 7x10 feet, cement floors.

Manufacturing Building, Front and Jasper streets, Philadelphia, \$700. John Bromley & Sons (O), Lehigh avenue, between A and B streets, Philadelphia. Dorsey & Smith (C), 111 North Seventh street, Philadelphia. Boiler enclosure.

Rooming House, 1929 Spring Garden street, Philadelphia, \$500. T. T. Rockett (O and C), 629 North Nineteenth street, Philadelphia. Partition, lath and plaster.

Dwelling, 2825 West Girard avenue, Philadelphia, \$2,000. Gustav Leins (O), on premises. W. F. Koelle & Co. (C), Twenty-sixth and Oxford streets, Philadelphia. Brick, 1 story, 18x18 feet.

Dwelling, Sedgley, east of K street, Philadelphia, \$500. Walter Rogers (O), 1513 Cayuga street, Philadelphia. James Mole &

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Office Building, 3545 North Thirteenth st., Philadelphia, \$300. D. H. Stroud (O and C), 3340 North Broad street, Philadelphia. Brick, two-story addition, 20x20 feet, irregular size.

Dwellings (3), 5039-41-43 Reno street, Philadelphia, \$1,800. Sheridan Building and Loan Association (O), 514 Parkside avenue, Philadelphia. A. P. Lueker (C), 1727 North Fifty-first street, Philadelphia. Repairs.

Store, 1309 Bainbridge street, Philadelphia. Nathan Leidner (O), on premises. A. P. Lueker (C), 1727 North Fifty-first street, Philadelphia. Flush bulks.

Manufacturing Building, 232-34 Ionic street, Philadelphia, \$490. W. A. Brown (O), 3937 Locust street, Philadelphia. J. Bierling (C), 3823 Baring street, Philadelphia. Repair fire damages.

Store and Dwelling, 5146 Viola street, Philadelphia, \$400. Louis Samuel (O), on premises. A. P. Lueker (C), 1727 North Fifty-first

street, Philadelphia. Cellar doors.

Dwelling, 1312 South Tenth street, Philadelphia, \$300. A. Jacot (O and C), 1312 South Tenth street, Philadelphia. Brick, 2 stories, 12x10 feet, stone foundations.

Foundry Building, Sepviva, north of Wheat-sheaf Lane, Philadelphia, \$3,000. American Eng. Co. (O), on premises. The Austin Company (C), Bulletin Building, Philadelphia. Crane runway, 50x120 feet.

Machine Shop, Water and Mifflin streets, Philadelphia, \$795. Southward Bronze Co. (O), on premises. S. Shestack (C), 322 Dickinson street, Philadelphia. Brick, 1 story, 10x100 feet, slag roof, stone foundations.

Garage, 330 South Juniper street, Philadelphia, \$700. C. Newbold (O), Jenkintown, Pa. Specht & Snerry (C), Heed Building, Philadelphia. Minor alterations, repairs.

School, 2911 North Eighth street, Philadelphia, \$1,500. Montifon Cong. (O), on prem

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Son (C), 1717 Cayuga street, Philadelphia. Repair fire damages.

Dwelling, 1415 North Broad street, Philadelphia, \$500. Dr. H. C. Deaver (C), 1415 North Broad street, Philadelphia. Mokin Heating Co. (C), 1829 Filbert street, Philadelphia. Warm air heating system.

Foundry, Jenks and Bath streets, Philadelphia, \$20,000. Pennsylvania Forge Co. (O), Jenks and Bath streets, Philadelphia. Wm. F. Donley Co. (C), Baxter Building, Philadelphia. Concrete foundations, 1 story, irregular size, steel building.

Garage, Atlantic avenue, east of G street, Philadelphia, \$300. Stephen Cooper (C), 3523 G street, Philadelphia. Howard Faulkner (C), 3523 G street, Philadelphia. Brick, 1 story, slag roof, cement floors, stone foundations.

Building, Twenty-fourth and Vine streets, Philadelphia, \$3,000. John Lang Paper Co. (O), Twenty-fourth and Vine streets, Philadelphia. Wm. H. Eddlemen & Sons (C), 453 Green Lane, Roxborough, Philadelphia. Steel and concrete platform.

Store and Dwelling, Twentieth and Snyder avenues, Philadelphia, \$1,000. John Sommers (O), on premises. Smith-Hardican Co. (C), 1006 Cherry street, Philadelphia. New flush bulks.

Dwelling, 8221 Seminole street, Philadelphia, \$1,800. Geo. K. Johnson (O), on premises. Arthur L. Schock (C), 45 West Graver's Lane, Philadelphia. Brick, 1 story, 16x10 feet.

Dychoose, Emerland and Huntingdon ave., Philadelphia, \$1,450. John Keenwood (O), on premises. Edwin Wingle (C), 1239 East Nevada street, Philadelphia. Stone foundations.

Dwelling, 317 Spruce street, Philadelphia, \$700. D. Salkind Co. (O), 227 Race street, Philadelphia. Schechtman Bros. (C), 1734 N. Seventh street, Philadelphia. Brick, 1 story, rear addition, 20x28 feet, slag roof, stone foundations.

Dwelling, 1337 South Fifty-fourth street, Philadelphia, \$300. M. Goldstein (O), on premises. Jake Bender (C), 1817 South Fourth street, Philadelphia. Rear shed, slag roof, 1 story.

Store, 1634 Chestnut street, Philadelphia, \$400. Eastern Motors Corp (O), Broad and Wallace streets, Philadelphia. Smith-Hardican Company (C), 1006 Cherry street, Philadelphia. Flush bulks.

Coal Pocket, York Road and Butler street, Philadelphia, \$1,150. Welsh Bros. (O), on premises. Specialty Eng. Co. (C), Allegheny avenue and Trenton street, Philadelphia. Coal pockets, concrete foundations.

Dwelling, 1510 DeLaney street, Philadelphia, \$600. J. Warner Steele (O), on premises. John E. Walt (C), 204 East Willow Grove avenue, Philadelphia. Interior alterations.

Dwelling, 8209 Holstein avenue, Philadelphia, \$500. James Ruffner (O), on premises. Frank Thomas (C), Eighty-third and Tinicum avenue, Philadelphia. Brick, 2 stories, 12x16 feet, slag roof, alterations.

Store and Dwelling, 914 Passyunk avenue, Philadelphia, \$1,000. A. M. Riccardi (O), on premises. D. D. Buro (C), 809 South Eighth street. Interior alterations.

Dwelling, 806 Wilder street, Philadelphia, \$1,000. H. Goldberg (O), 1420 South Eighth street. C. W. Chamberlain (C), 1501 South Sixth street. Brick, 1 story, 10x9 feet, stone foundations.

Garage, northeast corner of Juniper and Appletree streets, Philadelphia, \$7,000. J. Walter Rosenberg (O), 151 South Broad street.

W. L. Roberts (C), 228 North Sixteenth street, Philadelphia. Low pressure steam heating system.

Shop, 1510 North Franklin street (rear), \$500. B. Bornstein (O and C), 1510 North Franklin street, Philadelphia. Brick, 1 story, general repairs.

Lunch Rooms, Margaret and Bermuda sts., Philadelphia, \$3,000. Barrett Co. (O), on premises. A. R. Raff Const. Co. (C), 1635 Thompson street. Frame, 4 stories, 30x50 feet.

Storage Building, Margaret and Bermuda streets, Philadelphia, \$18,000. Barret Co. (O), on premises. A. R. Raff Const. Co. (C), 1635 Thompson street, Philadelphia. Reinforced concrete, 2 stories, 109x59 feet, slag roof.

Warehouse, Margaret and Bermuda streets, Philadelphia, \$48,000. Barrett Co. (O), on premises. A. R. Raff Const. Co. (C), 1635 Thompson street, Philadelphia. Reinforced concrete, 88x332 feet, slag roof, 3 stories.

Store and Dwelling, 1633 South street, Philadelphia, \$450. M. C. Lenin (O), on premises. A. Warshavsky (C), 543 North Seventh street, Philadelphia. Alterations.

Dwelling, 1935 Chestnut street, Philadelphia, \$1,935. Isaac Kershaw (O), 5215 Chestnut street, Philadelphia. Geo. M. Crowl (C), 5510 Walnuting avenue, Philadelphia. Repairs.

Dwelling, 2426 East Huntingdon street, Philadelphia. Dennis Bradley (O), on premises. John Jamison (C), 2581 East Huntingdon street, Philadelphia. Brick, 2 story addition, 11x13 feet, stone foundations.

Shed, Hutchinson and Rising Sun Lane, Philadelphia, \$640. Fred Wittmaier (O), 3528 North Eleventh street, Philadelphia. John Schuster (C), 3552 North Fifteenth street, Philadelphia. Shed, 16x64 feet, slag roof.

Factory Building, York and Jasper streets, Philadelphia, \$700. Thomas Buck & Sons (O), on premises. Wm. Steele & Sons Co. (C), Sixteenth and Parkway, Philadelphia. Repairs.

Office Building, Fourth and Chestnut streets, Philadelphia, \$3,500. Provident Life and Trust Co. (O), on premises. Furness, Evans & Co. (C), Franklin Bank Building, Philadelphia. Plastering, partitions, cement work.

Dwelling, 1633 South Second street, Philadelphia, \$540. Isador Laskinsky (O), on premises. M. Fishman (C), 1014 Shackamaxon street, Philadelphia. Two-story addition, 10x11 feet, slag roof, stone foundations, interior alterations.

Church, 2411-13 North Alder street, Philadelphia, \$400. Bright Hope Baptist Church (O), on premises. J. F. Trent (C), 2041 Master street, Philadelphia. Brick, 1 story, 28x29 feet, stone foundations, slag roof.

Store, 135-37 South Fifteenth street, Philadelphia, \$1,200. J. Devlin (O), 1424 South Penn Square, Philadelphia. B. J. McKenna (C), 2643 North Hutchinson street, Philadelphia. Alterations.

Dwelling, 2004 North Eleventh street, Philadelphia, \$300. Michael McLoughlin (O), on premises. John McGowan (C), 1015 Morris street, Philadelphia. Alterations.

Factory, Broad and Schiller streets, Philadelphia, \$1,600. The Bero Co. (O), Ontario and Bath streets, Philadelphia. The Joseph Levin Co. (C), 1530 South Sixth street, Philadelphia. Rebuild dangerous wall.

Garage, 5411 North Sixth street, Philadelphia, \$420. Ed. L. Beckitt (O), 5411 North Sixth street, Philadelphia. John M. Haffie (C), 2016 North Fifth street, Philadelphia. Brick, 1 story, 17x12 feet, stone foundations, slag roof, hardware, glass, lumber.

Dwelling, 323 Catherine street, Philadelphia, \$450. C. Cosoy (O), on premises. D. Goldstein (C), northwest corner of Sixth and Jackson streets, Philadelphia. Flush cellar doors.

Club, 1728 South Broad street, Philadelphia, \$1,000. The Augustine Club (O), on premises. A. Donaldson (C), 2236 Oakford street, Philadelphia. Two-story rear, slag roof and alterations.

Manufacturing Building, Nixon and Umbria streets, Philadelphia, \$9,000. Wabash Mills (O), on premises. E. L. Cuthbertson (C), 334 Roxborough street. Brick, 26x24 feet, 16x20 feet, 4 stories and basement, slag roof.

Dwellings, 16, 18, 24 and 26 Carpenter st., Philadelphia, \$1,300. Wilson & Chadwick (O), 515 Pelham Road, Philadelphia. McClinck & Weaver (C), 24 West Phil-ellena street, Philadelphia. Repair shingle roofs.

Store, 1802 Ridge avenue, Philadelphia, \$900. Ridge Avenue Farmers' Association (O), on premises. F. A. Havens & Co. (C), 843 North Nineteenth street, Philadelphia. Erect new store front.

Mill Building, Seventeenth and Indiana avenue, Philadelphia, \$800. Pooley Furniture Co. (O), on premises. Philip Di Giacomo (C), 2036 West Clearfield street, Philadelphia. Tank supports.

Garage, 901 South Fifty-fourth street, Philadelphia. George Kelly (O), 901 South Fifty-fourth street, Philadelphia. Samuel Edge (C), 5014 Willow street, Philadelphia. Brick, 1 story, 16x20 feet, iron roof.

Dwelling, 3835 North Thirteenth street, Philadelphia, \$300. Chas. H. Eckert (O), 3835 North Thirteenth street, Philadelphia. Wm. J. Jones (C), 2924 North Fifth street, Philadelphia. Frame shed, 11x8 feet, stone foundations, slag roof.

Warehouse, American and York streets, Philadelphia, \$300. John S. B. Rex (O and C), 2410 North Philips street, Philadelphia. Tank supports for 25,000 gallon tank.

Factory, Allegheny and Trenton avenues, Philadelphia, \$2,500. Specialty Eng. Co. (O and C), on premises. Brick, concrete, 46x68 feet, metal snsh.

Dwelling, 6003 Rising Sun Lane, Philadelphia, \$400. H. H. Greene (O), on premises. M. H. Hirsch (C), on premises. Stone foundations, brick, 1 story, 16x10 feet.

Dwelling, 125 North Sixty-third street, Philadelphia, \$500. Robert C. Bond (O and C), 125 North Sixty-third street, Philadelphia. Frame porch, 9x18 feet.

Dwelling, 2652 Bridge street, Frankford, Philadelphia, \$365. F. Harman (O), on premises. Amos W. Linn (C), 4767 Garden street, Philadelphia. Frame, 2 stories, 15x15 feet.

Store, Eighty-first and Tinicum avenue, Philadelphia, \$1,500. S. Meschinkel (O), 161 Olive street, Philadelphia. A. Johnson (C), 705 North Second street, Philadelphia. Iron, 1 story, 20x70 feet, slag roof.

Power House, Coral and Wall streets, Philadelphia, \$800. Hulton Dyeing Co. (O), 3819 Frankford avenue, Philadelphia. F. Crompton & Bro. (C), 4614 Oakland street, Philadelphia. Brick, 15x18 feet, cement foundations.

Machine Shop, Tackawanna, south of Church Road, Philadelphia, \$8,700. George Oldham & Son Co. (O), Frankford, Philadelphia. Rush Bros. (C), 1100 Fillmore street, Philadelphia. Brick, 2 stories, 16x33 feet, slag roof, stone foundations, mill construction.

Store and Dwelling, 930 Christian street, Philadelphia. G. Chieetti (O), 910 South

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Ninth street, Philadelphia. M. Di Orpin (C), 1134 Watkins street, Philadelphia. Alterations.

Garage, 4428 North Eighth street, Philadelphia, \$500. C. C. Snyder (O and C), 4428 N. Eighth street, Philadelphia. Stone foundations, brick, 1 story, slag roof, 16x11 feet.

Shed, Water and Greenwich streets, Philadelphia. W. J. O'Brien (O), on premises. E. J. Kreitzburg (C), 1345 Arch street. Brick, 24x24 feet, slag roof.

Dwelling, 3540 K street, Philadelphia, \$300. John Kock (O), 3545 K street, Philadelphia. Bushnell Bros. (C), 2146 East Norris street, Philadelphia. Interior alterations.

Toilet Rooms, 3819 Frankford avenue, Philadelphia, \$1,200. Hulton Dyeing Co. (O), on premises. F. Crompton & Bro. (C), 4614 Oakland street, Philadelphia. Three-story addition, 10x8 feet, reinforced concrete floors.

Manufacturing Building, Main street, west of Walnut Lane, Philadelphia, \$300. R. Hey & Sons (O), on premises. John H. Hurley & Co. (C), 4416 Cresson street, Philadelphia. Minor alterations.

THE PLUMBER APPRECIATED.

(Continued from Page 416.)

est neighbor,—rarely, if ever, does he carry his generosity so far as to help carry the buckets,—that because of this honest soul in overalls, winter has lost the terrors which it held for your great-grandfather.

Revisit your library, and note what the chroniclers of the past thought about winter—"this cousin to Death, father to sickness, and brother to old age" (as Thomas Dekker bitterly called it; and well would your great-grandfather have agreed with him), when "the first word that a vench speaks on your coming into a room in the morning is 'Prithee send for some faggots.'" It is bad enough when (to adapt Dekker's sixteenth century phraseology) the first word that a vench speaks on your coming into a room in the morning is "Prithee send for a plumber"—but how seldom it happens! And because we can send for a plumber, our attitude toward winter is joyfully changed for the better: lovely autumn is no longer regarded as melancholy because winter is coming, nor backward spring esteemed beyond criticism because winter is over.

Those good old days, after the sun had entered Capricorn, were cold and inconvenient old days. Observe great-grandfather: all his plumbing was a pump, which often froze beyond his simple skill in plumbers; and then he drew water from the well in a dear old oaken bucket (as we like to think of it), emptied it into other buckets, and carried it by hand, even as a man now carries the water loaned him by his generous neighbor, wherever the useful, unpoisoning fluid was needed. No invisible brook flowed through his house, and gushed obligingly at faucets hot or cold according to great-grandfather's whim; no hot water pipes suffused his dwelling with grateful warmth. These are our blessings—and it is the plumber with only

a boy to help him, who contends manfully against the forces of nature, and keeps them going. For the life of the house depends nowadays on its healthy circulation of water; and when the house suffers from arteriosclerosis, the plumber is the doctor, and the strange, impassive boy is the trained nurse.

Sometimes in an emergency he arrives without this little companion: I have myself, rising to the same occasion, taken the boy's place. I was a good boy. The plumber admitted it. "Fill th' kettle again with hot water off th' stove," said he, over his arched back as he peered shrewdly down a pipe to see how far away it was frozen, "there's th' good boy." Thus I know that the boy is not, as our minor humorists would have us believe, a mere flourish and gaudy appanage to the plumber's autoceratically assumed grandeur. His strange, impassive manner is probably nothing more or less than concentrated attention; as if he said, with Hamlet, "Yea, from the table of my memory I'll wipe away all foolish, fond regards, all saws of books, all forms, all pressures past, that youth and observation copied there; and thy commandment all alone shall live within the book and volume of my brain, unmix'd with baser matter. Yes, by Heaven!" Even in putting in a new washer, I should do better with a boy.

The most nervous and conscientious plumber, I tell you, must at intervals appear, to an observer unacquainted with the art and mystery of plumbers, to be proceeding in a leisurely and perhaps idle fashion. The most methodical and conscientious man, plumber or not, will occasionally forget something, and have to go back for it. The most self-respecting and conscientious minor humorist, after he has exhausted his witty invention making a joke on a plumber, will try to sell it for the highest possible price. And if I, for example, am a little proud of my ability, greater than the plumber's, to write an essay, how shall I accuse him of arrogance if he is a little proud of his ability, greater than mine, to accomplish the more necessary feat of thawing a frozen water-pipe? He has a heart.

When I was a plumber's boy myself, I walked with my boss to his office in the vil-

lage to get a tool. It was a Sunday afternoon. I remember that a rooster crowed afar off, and how his lonely clarion enhanced and made more gravely quiet the peace of the Sabbath. And the plumber said, "I wouldn't have felt right sitting at home by the fire reading the paper, when I knew you was in trouble and I could pull you out." He had come, mark you, in his Sunday clothes; he had come in his best, not pausing even for his overalls, so that, in our distressed, waterless home, the lady of the house had herself encircled his honest waist with a gingham apron before he began plumbing. And in all the world there was nobody else whom we would have been so glad to see.

And so, bowing with my left hand over what I take to be the region of a grateful heart, I extended him this praise of plumber. No plumber came over in the Mayflower; but think not, for that reason, that he is a parvenue. He is of ancient lineage—this good fairy in overalls of our invisible brooks. The Romans knew him as the artifex plumbareus. Caesar may have interrupted the revision of the Commentaries to send for him. He disappeared, with civilization and water pipes, in the Dark Ages; he came back, with civilization and water pipes, when the darkness lifted. Neglected by art, disregarded by Romance, and unconsidered by the drama, these rich and entertaining expressions of life are as nothing when his presence is called for.

We may live without painters

Or writers or nummers,

But civilized man cannot

Live without plumbers.

He, too, should have his statue, not of bronze, marble, or granite, but of honest lead with two figures—the Plumber, holding aloft his torch, and the Plumber's Boy, strange, impassive, and holding in his pendant hands a monkey wrench and the coil of flexible tubing with which his master cunningly directs hot water into the hardened arteries of a suffering house. And on his pedestal I would carve the motto,—

"Did You Ever Know a Plumber Who Had Grown Rich?"—(From the Contributors' Club in the "Atlantic Monthly.")

SAFETY ENGINEERING IN GENERAL CONTRACTING

Constant Watchfulness and a Campaign of Education Decrease the Number of Preventable Accidents

By L. D. Von Woedtke, Director of Safety, Fred T. Ley & Co., Inc.

Time and money expended in safety work not only comes back, but eventually results in an entirely new form of dividend, heretofore not considered under profit and loss.

A chart of the lost time, accident classification, of Fred T. Ley & Co., Inc., shows comparisons for the past three years—namely, 1915, 1916 and 1917. Taking 1915, the year this firm started systematic and organized

safety work, as the basis the reduction in the accident rate for 1916 was 25 per cent., and for 1917 55 per cent. The highest quarterly reduction was 80 per cent. for July, August and September, 1917.

By way of comparison the accident cost reduction for 1916 was 55 per cent. and for 1917 was 66 per cent.

The classification chart for the same period,

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Tasker Street Wharf, Delaware River, Philadelphia.

dividing the accidents into eight groups or causes, was as follows. Handling materials, falling materials, employees falling, handling tools, nails, flying materials, machines, miscellaneous.

The chart shows the number of accidents per 1,000 employees and the percentage of reduction for each year and each cause. In future it is intended to add four additional main causes, and when a monthly compilation of data indicates any cause or causes running high in percentage this group will be subdivided for two or three months in an effort to locate the particular occupations requiring special attention.

	Per Cent. Reduction.
April, May, June, 1915.....	13%
July, August, September, 1915.....	54%
October, November, December, 1915.....	37%
January, February, March, 1916.....	37%
April, May, June, 1916.....	28%
July, August, September, 1916.....	70%
October, November, December, 1916.....	51%
January, February, March, 1917.....	59%
April, May, June, 1917.....	80%
July, August, September, 1917.....	

Reduction by Years.

1916.	1917.
Accident Frequency	25% 55%
Accident Cost	53% 66%

Excluding the excellent record attained at Camp Devens, the wonderful success in accident prevention has been the result of a constant and systematic program of education and mechanical safeguards, and particularly through the enlistment and maintenance of the co-operation of the various superintendents, foremen, time-keepers and men in the field.

According to the figures it is estimated that not more than 30 per cent. of all building and contracting accidents can be eliminated by mechanical safeguards, and that at least 70 per cent. must be prevented by means of safety education.

The educational program arranged by this concern consists mainly of periodical letters of encouragement, advice, suggestions and constructive criticism, quoting always some specific types of accidents which are showing a high percentage and always stating or suggesting specific remedies. In this way accidents from all causes have been reduced materially. Later practically the same suggestions are repeated in changed form to influence a further reduction in the number of accidents from any one cause.

The Department of Safety encourages suggestions and ideas from all employees, which, when received, are quoted in the general safety letters. Many of the best methods of operation and procedure in the campaign for a reduced casualty list have been received in this manner.

Pointed safety slogans at the foot of all letters sent out by the Safety and Protection Departments, have a tendency to influence the men to think in terms of "safety first."

Bulletin boards are, of course, posted on all operations, and fresh bulletins are supplied periodically. Usually four bulletins are sent out at a time, and the most of these are posted temporarily until new ones are received. However, some are posted permanently. The job bulletin board is usually three or four feet square, and shows about twelve bulletins at one time. The larger projects naturally have more than a single bulletin board so that all employees may readily read the advice and suggestions displayed. This bulletin service is invaluable, as men will stop to look at striking illustrations and read large type, well versed and to the point, who might otherwise never get the "Safety Bug." The foreign laborer will also stop to look at pictures, although he may not be able to read.

In order to give some idea of the possibilities for safety work in general contracting a few methods employed against each of the eight main causes will be stated:

Handling Materials:

1. Proper piling and bracing of supplies of lumber, pipe, brick, cement, etc.
2. Stout, sound runways and platforms of selected materials and proper construction. No makeshifts by workmen allowed.
3. Wheelbarrows, scale boxes, blocks and falls, dump and flat cars, etc., kept in good condition, or discarded if unsafe. Constant inspection made, and employees requested to report all unsafe conditions.
4. Continual cautioning by foremen against the "drowsy" habit and butter fingers.

Falling Materials:

1. Skirt or toe boards on all stagings, scaffolds and on all exposed edges of floors and elevator shafts, openings, etc.
2. The use of closed-in chutes for rubbish and waste material.
3. Daily inspection of all hoisting apparatus and equipment on the job, and thorough overhauling at main equipment plant when returned from or sent to a job.
4. Tables of safe loads for ropes, chains and cables; also slings at various angles.

Employees Falling:

1. Railings on pits, staging, scaffolds and unused sides of floor openings for ladders, etc., and elevator hoist shafts.
2. Passageways, floors and working spaces kept clear of waste and surplus materials.
3. Good ladders with safety feet where advisable, or toed, braced or lashed to prevent slipping.

Handling Tools:

1. Tool house and toolmen are provided on all jobs, who inspect, repair and sharpen all tools.
2. Plenty of tools provided, allowing one

or more sets being repaired or sharpened while others are in use.

3. Heads of all bullpoints, chisels, drills and hammering tools dressed and trimmed every time points or edges are sharpened, thus eliminating burred or mushroomed tools.

Nails:

1. Waterboys, toolmen, etc., equipped with hammers and instructed to constantly bend over or pull out all protruding nails.
2. Stripped forms in concrete work piled clear of passageways as taken down and protruding nails piled downward.

Flying Materials:

1. Goggles are kept on every job, in every tool box and tool house.
2. Foremen are held responsible for men wearing goggles when chipping or drilling concrete, stone, iron, steel, etc.
3. Extra sets of chipping and drilling tools provided to allow one or two sets always being sharpened or repaired while others are in use.

Machines:

1. All gearing, revolving projections, keys, set screws, clute jaws, etc., thoroughly enclosed on mixers, hoisting engines, drums, winches, cranes, steam shovels, saws, etc.
2. Headless set screws, shaft and pulley housing wherever possible.
3. Adequate grab handles and steps on locomotives, cranes, steam shovels, cabs, dump and flat cars, etc.
4. Correct guards on gauge glasses and water column.
5. All saws (circular, split, cross-cut, overhead or treadle swing, band, etc.) equipped with approved safeguards, such as spreaders, blade enclosures, travel limits, table guards, etc.
6. Jointers or buzz planers provided with cylindrical or safety heads.
7. Pulley blocks equipped with side plates or flanges to protect mesh point between ropes and blocks.
8. Hooks for large hoists, cranes and derricks provided with handle on back.

Miscellaneous:

1. Acid earboys equipped with wooden frame inclinators.
2. Exposed electric wires, switches, transformers, etc., protected against personal contact wherever possible by barriers, enclosures, cabinets, etc.
3. Adequate shoring in excavations, or tops kept broken down to prevent cave-ins.
4. Appropriate danger signs, tags and warnings.

There are naturally many other methods being used by this concern in furthering its plans for accident prevention, but the ones described are the most important and from which the gratifying results were obtained.—"Record and Guide."

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Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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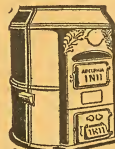
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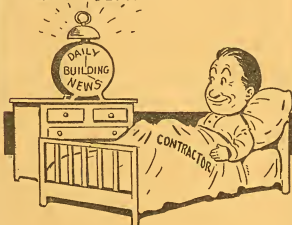


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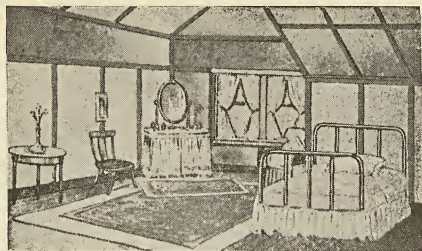
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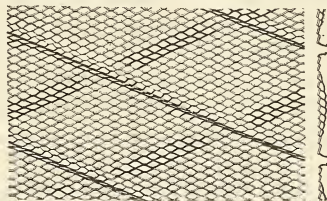
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 30

PHILADELPHIA
July 24, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide

PUBLISHED WEEKLY

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As The Editor Sees It



THE movement to preserve the building industry as a wealth producing factor during the period of the war and to save the non-war branches from disaster goes on apace.

At a conference in Atlantic City, on July 15, there were represented fifty-five national associations, covering every branch of the trade from lumber and brick to plumbing supplies, glass, paint and cement, including also several of the great labor federations in the building trades, fifty-five regional associations comprising the supply, engineering and contracting bodies of twenty-two states, and fifty-three individual manufacturing firms from the Atlantic Coast to San Francisco.

Harry A. Wheeler, of Chicago, president of the National Chamber of Commerce, said, in calling the meeting to order:

"Our excuse for calling this conference lies, first, in the fact that, as we have been studying the industries of this country and their relationship to the war program, we have found no single industry so far-reaching and so much disintegrated as the building trades."

In defining the position of the National Association of Builders' Exchanges, William B. King, of Washington, general counsel, explained:

"We all recognize that the profound disturbance of the building industry which has taken place is the normal result of the war. We are making no complaints. We are proud to suffer in such

a cause. But our leaders in Washington have no desire to cause more disturbance than is actually necessary. They are glad to see any productive industry making progress when this is consistent with war needs. There is no desire to kill business. We are, therefore, confident of an official welcome not only when we go to Washington with proffers of aid to carry on the war, but with suggestions whereby labor can be wisely employed in productive industry. We shall be serving the country in holding our organization intact during the war so as to resume work with the least possible delay when peace comes."

A sensation was created by members from Pittsburgh when they filed an objection to a section of articles of association submitted by a committee of manufacturers and distributors of building materials headed by Colonel John R. Wiggins, of Philadelphia. After enumerating specifically the bodies which might be members, the section added: "Any association of other persons, firms or corporations related to building."

R. D. Cochrane, of Pittsburgh, then demanded to know if this action would mean the admittance of organized labor.

Chairman Allan Walker, of New York, tried to prevent the raising of the issue by suggesting that the federation should leave the whole matter to its War Industries Committee.

He said also that representatives of organized labor who attended yesterday's

session of the building industries had gone.

"The chairman is mistaken," objected T. M. Guerin, of Troy, N. Y., representing the Brotherhood of Carpenters with 300,000 members. "We are here by invitation, we are ready to do anything in our power to help in furthering the prosecution of the war and the preservation of the building industry."

The only opposition to the adoption of the report was on the part of the Pittsburghers.

United States Senator Wm. M. Calder made very reassuring promises to the convention, that the movement to save the building industry will have strong support in Congress.

* * *

THE numerous plants in and near Tacony engaged in war industries has caused an acute condition in the housing situation in that vicinity. To solve the problem, the Government may step in and order construction of at least five hundred houses. One firm has suggested the building of barracks for 300 or 400 workmen. Just such a condition is illustrative of "The Danger in the Housing Problem" as related by Noble Foster Hoggson, President Hoggson Brothers, New York. Mr. Hoggson says:

In war time all problems are the "most important." It depends upon what is being agitated at any particular time--ships, munitions, airplanes, men, money, etc. Six months ago it was the housing of

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workmen. Men were sleeping fifteen and twenty in a room, sleeping in three shifts, one man, waiting his turn, routing another out of bed when his eight hours were up. Industrial housing was the question of the hour, the paramount issue, —the most important problem.

We do not hear so much about houses for workers to-day. Is it because the condition has been met? Because the houses have been provided? Not at all! It merely means that we agitated the housing proposition until we found something new to start an agitation about.

Read the technical building journals; scan the various building reports. There is hardly a section that is not clamoring for housing accommodations. In Maine they fear a tent city will have to house part of its new population this coming winter; every munition center, shipyard locality, industrial town, is almost as bad off in housing facilities as it was months ago. In Kansas, where one would little dream of expanding cities at this time, there is an acute shortage of housing. New oil discoveries have created new towns and boomed old ones.

Of course the problem will be solved, houses will be provided. But the great danger in the delay lies in this: the situation will become so desperate that any kind of shelter provided will be welcome. In other words, on the plea of expediency, there is a great danger of temporary shack construction being thrown up, and the dreams and plans for a constructive housing scheme along permanent lines will fall far short of realization.

The Bureau of Industrial Housing and Transportation of the Department of Labor some months ago, in consultation with Lawrence Veiller, Secretary of the National Housing Association, and assisted by a number of notable architects and city planners, adopted a set of standards which is recommended for permanent industrial housing developments. These standards were well conceived and far-seeing. If followed, they would establish housing enterprises on an encouraging basis.

But, no less than in the days at Valley Forge, "these are times that try men's souls," and as the necessity for housing grows more and more acute, the temptation to throw up temporary structures, even temporary settlements, will be difficult to resist.

Witness this item from the *Emergency Fleet News* of July 1st:

"Although steps are under way to erect about 1,600 homes in Wilmington, the housing situation there, on account of the influx of shipyard and other workers, is so acute that it is proposed to have the City Council lift the ban on frame dwellings, so that ready-made shelters may be erected temporarily. Official moving day in Wilmington was June 25th. Many

families were notified to move on that day, and had no place to go. Many complaints have been made of the high rents charged."

The best way to promote the growth of Bolshevism in this country is through maintaining a low standard of living, of continuing to force three men to occupy the same bed in eight-hour shifts, of herding twenty men and more into one room for sleeping quarters.

The solution to a problem of social unrest is through the ministrations of social justice. The average worker (the ma-

jority) seeks nothing more than a condition of contentment,—a family, a decent living wage, a place in the community, the full rights of citizenship. These may be all summed up in "Home."

Housing is not only an immediate problem, it will be one of the big after-the-war problems. Now is the time to solve it, not only for the present, but for the future. We must build real homes, establish real communities, *permanent* homes and *permanent* communities. We must do it now, and do it right, before it may be too late.

ALIENS IN AMERICAN INDUSTRIES

Industry Faces a Grave Problem in the Unfriendly Employee, Alien or Disloyal Citizen—The Outline Below Indicates a Practical Method of Solving This Problem

First of all take a census of all employees and divide them into four classes: native born, naturalized citizens, friendly aliens, alien enemies. If they are naturalized citizens of enemy alien descent they had better be classed industrially with alien enemies until something of their history and record is known. Let us insist frankly that a man born on another soil has to prove himself for America. A certificate of naturalization granted under our inadequate requirements, where often a job is the goal, is not enough to class him with a native American.

Second—make an analysis or a map of your plant showing its vulnerable spots. Where will a fire do the greatest damage, where is waste accumulated, what hydrant is most vital in extinguishing a fire, where is the control of your lighting system; and how accessible is your surtax bond; where will an explosion cause the most damage; what machines are most vital or difficult to replace, where can goods in transit be tampered with easiest? A dozen other things have already suggested themselves to you.

Now find out what kind of workmen are in charge of these vulnerable points. If they are enemy aliens, transfer them at once. Don't wait to have them prove their loyalty. Some other point in the shop will not decrease their efficiency and it may increase your safety. The fire brigade and the man who can reach the hydrant the quickest ought to be loyal American workmen—just as men in the boiler room and at delicate machines should also be. What are you paying men at these points, and what do you know about them?

Surveillance and guards and sentinels are the next most important considerations. The number and location of these should be determined by the numbers and location of alien enemies and persons of doubtful loyalty, and second by the strategic points to be guarded. Both systems are necessary—one for men, the

other for places. They check each other and insure safety. With only the one method there will at various times be exposed points. One agent may be diverted, but two or more are more difficult to divert simultaneously.

When fences are put up and dindows barred and guards established, do you consult your factory plan to see that every vulnerable part is included or do you do like one concern in New England—leave your transformer out in a field, fifty feet outside of the fence, where an enemy with a tin can of powder could paralyze your plant? Safeguarding is a job of engineering, not a makeshift job that anyone can do. It would be interesting for each individual leader to find out who handled the work in his own plant.

Lighting is the next important essential. Every possible improvement should be made, vulnerable points should be especially well lighted. Keep alien enemies and persons of doubtful loyalty in the light all of the time.

Keep outsiders out. This is no time for outsiders or persons without official authority or business in war plants. Verify credentials of visitors. When they get in, see that they go only to the place they are supposed to go. Don't send them alone. Escort them in, stay with them, and escort them out.

One way to keep outsiders out is to reduce your labor turnover. Every time a new man is taken on who is not known, it increases the risk. After the registration of enemy aliens in February, ask every new employee if he has such a registration card. If your shop is handling war supplies of the first magnitude try to get every alien enemy out, not by throwing him out, but by exchanging with some industry that is not manufacturing war supplies. A man thrown out of a job because he is an alien may go to another plant in bitterness of spirit and wreck it for no other reason than to get even with his first employer. You help

(Continued on Page 435.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Storehouse. Spec. 3231, Navy Yard, Philadelphia, \$1,200,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete, brick and steel. Owners taking bids, due August 5th. Irwin & Leighton, 126 North Twelfth street, and Warren-Moore Co., Colonial Trust Building; Cramp & Co., Denekla Building; Turner Concrete Steel Co., Presser Building; F. W. Mark Cont. Co., Finance Building; Thomas Reilly, 1616 Thompson street, are figuring.

Storehouse (add.). Spec. 3230, Navy Yard, Philadelphia, \$500,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete, brick and steel. Owners taking bids, due August 5th. Warren-Moore Co., Colonial Trust Building, and Irwin & Leighton, 126 North Twelfth street; Cramp & Co., Denekla Building; Turner Concrete Steel Co., Presser Building; F. W. Mark Cont. Co., Finance Building; Thomas Reilly, 1616 Thompson street, are figuring.

Monastery (alts.) and New Chapel, southeast corner of Corinthian and Girard avenues, Philadelphia. Architect, H. G. Hammer, 808 North Seventeenth street, Philadelphia. Chapel, brick, brownstone front; monastery, alterations to present residence, size of both 60x108 feet. Owners, Nuns of the St. Clare, Chapel of Our Lady of Peace, care of architect. Preliminary plans in progress. Too early for details.

Roof and Skylight Repairs, City Hall, Philadelphia, \$10,000. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, 113 City Hall. Consists of general repairs to roof and skylights, copper work. Owners taking bids, due July 30th.

Alterations to Piers, Nos. 78, 16, and 5, South Wharves, Philadelphia. Architect, private plans. Owners, City of Philadelphia, Department of Wharves, Docks and Ferries, Bourse Building, Philadelphia. Plumbing, steam heating and painting. Owners taking bids, due July 26th.

Residence (alt.), 6718 Quincey street, Germantown. Architect, private plans. Owner, L. W. Dykeman, 6840 Garston street, Germantown. New partitions and interior alterations, hardwood floors, electric lighting. Owner taking bids. S. C. Tourison, 7014 Boyer street; Wm. J. Gruher Co., 219 East High street; and J. Sims Wilson Co., 1125 Brown street, are figuring.

Magazine Buildings (2), Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Samuel Hof, Cpl., Frankford Arsenal. Brick, steel and concrete. Plans in progress.

Quartermaster Terminal, Greenwich Point, Philadelphia, \$10,000,000. Architect, private

plans. Owners, U. S. Government, Constructing Quartermaster Department, care of Col. E. B. Morden, Chief, 504 Pennsylvania Building, Philadelphia. Brick and hollow tile. Consists of warehouses, piers, docks, railroad track storage, etc. Will cover 45 acres. Plans in progress.

Store House, Office and Oil House, Third and Erie avenue, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Twelfth and Market streets, Philadelphia. Reinforced concrete, brick and terra cotta, coping, 1 and 2 stories, 66x88 feet and 26x44 feet, asbestos and slate roof, concrete, granolithic, pine and maple floors, steam heating, electric lighting, rolled steel sash, copper skylights, fire and Almet doors, iron stairs, ornamental iron works, metal lath, elevators, wire work. Owners taking bids, due July 30th. Roydhouse-Arey Co., 112 North Broad street; F. W. Mark Const. Co., Finance Building; F. W. Van Loon, Denekla Building; H. E. Baton, 1713 Sanson street; Thos. C. Trafford, 1613 Sanson street; Wm. R. Dougherty, 1610 Sanson street; Robert E. Lamb Co., 843 North Nineteenth street; F. A. Havens & Co., 845 North Nineteenth street, are figuring.

Hospital (alts.), 524 Spruce street, Philadelphia. Architect, Le Roy S. Rothschild, Bulletin Building, Philadelphia. Owner, Jewish Maternity Hospital, on premises. Consists of general alterations. Architect taking bids, due July 26th. Lam Building Co., 1001 Wood street, and Davis & Clayton, 1817 North Twentieth street; D. Henwood, 1509 Wood street, are figuring.

Special Ammunition Store House and Metal Store House, No. 2, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Ordnance Department, Frankford Arsenal, Philadelphia. Brick, reinforced concrete, 1 story, 220x48 feet and 483x67 feet, slag roof, cement floors, concrete foundations, hollow tile, metal lath, rolled steel sash, steel, fire and kalamain doors, safety treads, roof ventilators, waterproofing. Owners taking bids, due July 29th. A. R. Raff Const. Co., 1635 Thompson street; Roydhouse-Arey Co., 112 North Broad street; F. W. Van Loon, Denekla Building; W. W. Anstine & Co., 1218 Filbert street; Warren-Moore Co., Colonial Trust Building; Stacy Reeves & Sons, 2011 Market street; John R. Wiggins Co., Otis Building; John N. Gill & Co., Otis Building; Ketcham & McQuade, 1029 Brown street; Irwin & Leighton, 126 North Twelfth street; F. W. Mark Cont. Co., Finance Building; Wm. R. Dougherty, 1610 Sanson street; Wm. Steele & Sons, Inc., Sixteenth and Parkway; Barclay White & Co., 1713 Sanson street; Turner Concrete Steel Co., 1713 Sanson street, are figuring.

Hospital (alts. and add.), Frankford avenue and Wakening street. Architects, Stearns, Woodnut & Schmol, Stephen Girard Building.

Owners, Frankford Hospital, on premises. Brick and terra cotta, 1 story and basement, 49x27 feet, slag roof, cement and pine floors, tile work, metal lath, galvanized iron skylights, roof ventilators, waterproofing (waterproofing, paving, fencing, weather strips, fly screens, heating, electrical work, plumbing, tile work, lighting fixtures, dumbwaiters, kitchen equipment, refrigerator and laundry equipment reserved). Architects taking bids, due July 27th. A. R. Raff Const. Co., 1635 Thompson street; Wm. R. Dougherty, 1610 Sanson street, and H. E. Baton, 1713 Sanson street, are figuring.

Library (alts.), Sixty-fifth and Girard avenue, Philadelphia. Architect, Chas. Balderston, 411 Walnut street, Philadelphia. Owners, Free Library of Philadelphia, care of Librarian, John B. Ashurst, Thirteenth and Locust streets, Philadelphia. Consists of alterations. F. A. Havens Co., 845 North Nineteenth street, is figuring.

Hospital, Seventh and Delancey streets, Philadelphia. Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babier Hospital of Philadelphia, care of Mr. Davidson, 1713 Walnut street, Philadelphia. Fireproof, brick and granite, steel and reinforced concrete, 6 stories and basement, 40x81 feet, slate and cement roof, stone foundations, steam heat, electric light, tile and marble work, rolled steel sash, fireproof doors, cement and composition floors, metal lath, elevators, metal window guards, waterproofing (heating, plumbing, sterilizers, refrigerators, incinerators, ranges, kitchen cabinets, electric wiring and electric elevator reserved). Architects taking revised bids from Wm. R. Dougherty, 1610 Sanson street; Robert E. Lamb Co., 843 North Nineteenth street, and F. B. Davis, 240 North Sixteenth street.

Well-liners (2), 7200-16 Oakley street, Philadelphia, \$16,200. Architect, private plans. Owner, C. M. Stevens, 910 Fanshaw street, Philadelphia. Brick, 2 stories, 14x25 feet, slag roof, hot air heating, stone foundations. Owner will build.

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An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

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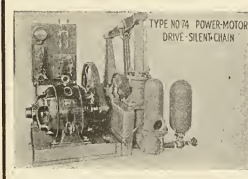
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Commercial Trust Building PHILADELPHIA

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Residence (add.), 112 West Walnut Lane, Germantown, \$11,000. Architect, Mantle Fielding, 28 West Walnut Lane, Germantown. Owner, Chas. W. Schwartz, Sixth and Tabor Road, Philadelphia. Stone, 3 stories, 24x36 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Contract awarded to William J. Gruher Co., 219 East High street.

Store (alts.), 230 Calowhill street, Philadelphia. Architect, Carl P. Berger, South Penn Square, Philadelphia. Owner, Julius Olsheski, care of Continental-Equitable Trust Co., trustee, Stephen Girard Building, Philadelphia. New front, brick and plaster, tile work. Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Residence (alt. and add.), Sixty-eighth avenue and Thirteenth street, Oak Lane. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, David Atlas, southwest corner of Sixty-eighth avenue and Thirteenth street, Oak Lane. Interior alterations, new partitions (heating, electric lighting and painting reserved), tile and marble work, tin roof, hardwood floors, terra cotta tile lining. Contract awarded to Wm. R. Dougherty, 1610 Sanson street, Philadelphia.

Manufacturing Building, 1021-23 East Columbia avenue, \$8,250. Architect, C. E. Schermerhorn, 430 Walnut street, Philadelphia. Owners, Elissa Webb & Sons Co. 136 South Front street. Brick, 1 story, 40x109 feet, slag roof, hollow metal skylights, electric lighting and plumbing (heating reserved). Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street.

Carpenter Shop and add. to Engine Shop, Nineteenth and Sedgley avenue, \$17,000. Architect, private plans. Owners, Chas. H. Wheeler Manufacturing Co., Eighteenth and Lehigh avenue. Brick, 1 story, 64x48 feet and 41x51 feet, slag roof, concrete founda-

tions, concrete floors. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Residence (add.), Oak Lane, Philadelphia, \$5,000. Architect, J. Fletcher Street, 129 S. Fifth street, Philadelphia. Owner, S. S. Fretz, Jr., 1305 Oak Lane avenue. Stone, 1 story, lounging room and conservatory addition, slate roof, steam heating, electric lighting, tile and marble work. Contract awarded to H. H. Burrell, 206 South Quince street, Philadelphia.

Residence (add.), 49 Bethlehem Pike, Chestnut Hill, Philadelphia. Architects, Brockie & Hastings, 1713 Sanson street, Philadelphia. Owner's name withheld. Stone, 3 stories, 12x20 feet, general alterations, slate roof, hot air heating, electric lighting, tile and marble work, pine floors. Contract awarded to H. H. Burrell, 206 South Quince street, Philadelphia.

Automobile Show Room and Factory, 3843 North Broad street, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Haas Automobile and Supply Co., 4303 North Fifteenth street. Brick, alterations and additions from present building to building 20x101 feet, three-story addition, 20x20 feet, one-story addition, 50x20 feet, slag and tin roof, cement floors, 1 fire door (heating, electric lighting and plumbing reserved). Contract awarded to John Roman, 4521 Pulaski street, Philadelphia.

Finished Machine Shop and Half Yard Runway and Rough Machine Shop, Roberts avenue and Juniata street, Nicetown. Architect, private plans. Owners, Midvale Steel Co., Nicetown, Philadelphia. Steel, brick, reinforced concrete, terra cotta coping, 1 story, 562x183 feet, 482x114 feet, and heat treatment plant, 400x74 feet. Contract for structural steel awarded to McClintic-Marshall Co., Morris Building, Philadelphia.

Rectory (alts. and add.), Fourth and Reed streets, Philadelphia. Architect, George I. Lovatt, 415 Walnut street, Philadelphia. Owners, St. Alphonsus' R. C. Church, care of Rev. Bernard Phillips, rector, Fourth and Reed streets, Philadelphia. Consists of general interior alterations. Contract awarded to Wm. R. Dougherty, 1610 Sanson street, Philadelphia.

Mill Building, Fifty-seventh and Gray's avenue, Philadelphia. Architect, private plans. Owners, Unit Construction Co., Fifty-seventh and Gray's avenue, Philadelphia. Brick and reinforced concrete, 1 story, 81x80 feet, slag roof, stone foundations, cement floors, rolled steel sash, fire doors. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Pennsylvania Construction News

Stores (4) and Apartments (16), 425-29 E. Third street, South Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, South Bethlehem, Pa. Owner, Aananor Potruch, East Third street, South Bethlehem, Pa. Brick, 3 stories, 100x80 feet, slag roof, brick and concrete foundations, steam heating, electric lighting, tile and terrazzo work, metal skylights, fire doors, yellow pine floors, hollow tile. Plans in progress. Parquet floors, metal bulks, wired glass, plumbing fixtures.

Apartment, Poplar and Buttonwood streets, South Bethlehem, Pa. Architect, E. H. Bittin, 53 South Main street, Bethlehem, Pa. Owner, Mr. Conroy, on premises. Brick, 3 stories, 50x80 feet, slag roof, stone foundations, combination lighting, pine floors. Plans in progress.

Moving Picture Hall, Bangor, Pa. Architect, C. P. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, H. Weiss, Bangor, Pa. Brick, 1 story, 35x150 feet, slag roof, concrete foundations, steam heat, electric light, composition floors, store front. Plans in progress.

Garage, Bethlehem, Pa. Architect, Robert Owen, 53 South Main street, Bethlehem, Pa. Owner's name withheld. Brick, 1 story, 22x39 feet, slate roof, cement foundations. Plans in progress.

Residence (alt.), South Bethlehem, Pa., \$7,000. Architect, D. Levy, 938 Hamilton street, Allentown, Pa. Owner's name withheld. Brick and stucco, 2½ stories, 23x45 feet, slag roof, hardwood floors, decorating, heating, tile work, lighting and plumbing. Plans in progress.

Mercantile Building, Fourth and Broadway, South Bethlehem, Pa. Architect, C. P. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, Edmund Young, South Bethlehem, Pa. Hollow tile, 1 story, 40x80 feet, slag roof, concrete foundations, hot air heating, electric lighting, tile work, yellow pine and composi-

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Pennsylvania Building

tion floors. Architect taking bids, due in two weeks. Earl Garber, Byork & Blom and Brunethiel, all of South Bethlehem, Pa.; F. B. Glassmire, Bethlehem, Pa., and Butz & Clader, Allentown, Pa., are figuring.

Residence (alt. and add.), Devon, Pa. Architect, Wesley Leshner Blithe, 608 Chestnut street, Philadelphia. Owner, Geo. R. Lancaster, 1303 North Broad street, Philadelphia. Stone and rough cast, 2½ stories, 82x50 feet, tin roof, hardwood floors, hot water heating, tile and marble work. Architect taking bids, due July 30th. F. E. Wallace, 1220 Chancellor street; James Johnston, 1721 Ludlow street, and Gray Bros., Rosemont, Pa., are figuring.

Houses (300) and Apartment Houses (3 or 4), North Essington, Pa. Architect, Clarence E. Brazer, Chester, Pa. Owners, Westinghouse Electric Co., Essington, Pa., and Emergency Fleet Corp., 1421 Cherry street, Philadelphia. Brick and stucco, 2½ stories, shingle roof, hot air heating, electric lighting, gas ranges. Plans in progress. Emergency Fleet Corp., 1421 Cherry street, Philadelphia, will take sub-bids.

Washing Machine, Maple street, Reading, Pa., \$8,000. Architect, W. A. Fink, Franklin street, Reading, Pa. Owner, J. H. Knoll, Reading, Pa. Concrete foundations, extension and alterations, mill construction work, stucco work, Carey roofing. Plans in progress.

Engine House (alt. and add.), Tenth and Muhlenberg streets, Reading, \$8,000. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owners, City of Reading, Court House, Reading, Pa. Two stories, 1st floor, steel construction, cement floors. Will take bids soon on steel construction work.

Hotel, Harriman, Bucks County, Pa. Architect, private plans. Owners, Merchants Ship-building Corp., care of E. M. F. Corp., Bristol, Pa. Frame and stucco, 3 stories, 160x300 feet, slag roof, pine floors, steam heating, electric lighting, roof ventilators, wall board. Owners have received bids.

Garage, Tenth and Northampton streets, Easton, Pa. Architect, E. H. Bitting, South Bethlehem, Pa. Owner, J. H. Fulmer, Nazareth, Pa. Terra cotta (fireproof construction), 2 stories, 25x141 feet, slag roof, steam heating, electric lighting, cement floors. Owner will build.

School (alts. and add.), Willow Grove, Pa. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owners Abington Township School Board, Abington, Pa. Stone, 2nd story addition, 46x33 feet, two-story stairway, 46x33 feet, slag roof, steam heating, electric lighting, pine floors. Plans in progress. Architect will take bids in ten days.



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PENNSYLVANIA

Contracts Awarded

Bridge, Reading, Pa., \$65,000. Engineer, Wm. H. Dechart & Son, Baer Building, Reading, Pa. Owners, Carpenter Steel Works, Reading, Pa. Reinforced concrete, 325x25 feet, waterproofing. Contract awarded to Eli Focht & Son, Reading, Pa.

Morgue and Storage Shed, Gethsemane Cemetery, Reading, Pa. Architects, Muhlenberg Bros., Second National Bank Building, Reading, Pa. Owner, Mons. J. P. Bornemann, care of St. Paul's R. C. Church, Ninth and Walnut streets, Reading, Pa. Steel and cast iron, 2 stories and tank, 68x14 feet, concrete foundations, surfaced roofing, cement floors, Keasby & Mattison or Johns Manville asbestos shingle roof. Contract awarded to Beard Const. Co., Reading, Pa.

Houses (71), Swedeland, Pa. Architects, Savery & Scheetz, Stephen Girard Building, Philadelphia. Owners, Alan Wood Iron and Steel Co., Widener Building, Philadelphia. Brick and stone, 2 stories, 18x29 feet and 21x29 feet, slate roof, pine floors, stone foundations (plumbing, hot air heating and electric lighting reserved). Contract awarded to A. B. Millet, 1903 Venango street, Philadelphia.

Store (alts.), Easton, Pa., \$15,000. Architect, David Levy, 935 Hamilton street, Allentown, Pa. Owner's name withheld. Brick, new front, 1 story, 80x60 feet, slag roof, hardwood floors, tile and marble work. Contract awarded to F. J. Lerch, Easton, Pa.

Hospital (add.), Northampton, Pa., \$2,500. Architect, L. S. Jacoby, Commonwealth Building, Allentown, Pa. Owner, Dr. C. A. Hafl, Northampton, Pa. Frame, 1 story and basement, 26x25 feet, composition roof, steam heating, electric lighting, hardwood floors. Contract awarded to Allen H. Leivenberger, Fullerton, Pa.

Store and Apartments, near Allentown, Pa. Architect, Robert Ochs, Bethlehem, Pa. Owner's name withheld. Brick, general interior alterations, 3 stories, 32x48 feet, slate and tin roof, hot water heating, yellow pine floors. Contract awarded to Ochs Const. Co., Allentown, Pa.

Foundry and Locker Room, Allentown, Pa. Architect, Robert Ochs, Bethlehem, Pa. Own-

ers, Aldrich Pump Co., Allentown, Pa. Brick, 1 story, 45x63 feet and 14x30 feet, slate roof. Contract awarded to Ochs Const. Co., Allentown, Pa.

Bank (alts.), Bethlehem, Pa., \$6,000. Architect, H. T. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owners, Lehigh Valley National Bank, care of F. P. Snyder, Bethlehem, Pa. Interior alterations, 1 story, hardwood floors, tile work. Contract awarded to Specht Bros., South Bethlehem, Pa.

Store (alts.), 431 East Third street, South Bethlehem, Pa., \$2,000. Architect, E. H. Bitting, Wilber Trust Building, South Bethlehem, Pa. Owner, Jos. Friedman, 431 East Third street, South Bethlehem, Pa. New front, plate glass, 2 stories, hardwood floors, electric lighting. Contract awarded to L. Bauman, Broadway, South Bethlehem, Pa.

Residences (18), Park Hill Manor, Bethlehem, Pa. Architect, Robert E. Ochs, City Realty Building, Bethlehem, Pa. Owner, M. K. Huffman, Wilber Trust Building, South Bethlehem, Pa. Brick, 2 stories, slate and slag roof, pine floors. Owner is building.

Apartment House, Allentown, Pa. Architect, H. J. Wiegner, Bethlehem, Pa. Owner, Geo. Fisher, Allentown, Pa. Brick, 3 stories, 75x17 feet, slag roof, pine floors (steam heating, plumbing and electric work reserved). Contract awarded to Butz & Clader, Allentown, Pa.

Isolation Building, Abington, Pa. Architect, private plans. Owners, Abington Memorial Hospital, Abington, Pa. Brick and reinforced concrete, 1 story, 35x50 feet, slate and slag roof, steam heating, electric lighting, cement floors. Contract awarded to Frank G. Stewart, 1619 Sansom street, Philadelphia.

Residence (alts.), Phillipsburg, Pa. Architect, Geo. S. Idell, 34 South Sixteenth street, Philadelphia. Owner, H. B. Scott, Phillipsburg, Pa. Brick veneer on 2½-story frame house, asphalt shingle roof, hardwood and composition floors, vapor heating, electric lighting, plumbing, marble work, plastering, interior decorating, painting, partitions, stairways. Contract awarded to E. W. Lukens, Phillipsburg, Pa.

Garage, Northampton Heights, Pa. Archi-

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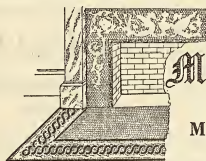
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teet, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, James F. Miller, Northampton Heights, Pa. Brick, 1 story, 20x42 feet, slag roof, cement floors, steam heating, electric lighting, concrete foundations. Contract awarded to Stoneback & Nase, Quakertown, Pa.

School (add.), Media, Pa., \$15,000. Architect, Walter Smedley, Stephen Girard Building, Philadelphia. Owners, Society of Friends, care of architect. Brick and stone, 1 story

and basement, 31x40 feet, steam heating, electric lighting. Contract awarded to J. W. Worrlow, Media, Pa.

Residence, Pottstown, Pa., \$35,000. Architect, Walter Smedley, Stephen Girard Building, Philadelphia. Owner, Comly B. Shoemaker, Pottstown, Pa. Stucco and brick, 3 stories, 35x40 feet, wing 17x21 feet, slate roof, hardwood floors, steam heating, electric lighting. Contract awarded to Fred H. Kaiser, Pottstown, Pa.

NEW JERSEY Construction News

Store (alts. and add.), Phillipsburg, N. J., \$7,000. Architect, David Levy, 938 Hamilton street, Allentown, Pa. Owner's name withheld. Brick addition, 1 story, 22x80 feet, new store front, heating, plumbing, general alterations. Plans in progress.

Section Base (17 buildings), Spec. 3210, Cape May, N. J. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Hollow tile, frame and stucco. Commanders' residence, 2 stories, 32x39 feet; mess hall, 1 story, 161x54 feet, wing 57x48 feet; gate house, 1 story, 83x25 feet; dispensary, 145x24 feet; scrub house, 60x25 feet, school, 167x54 feet, barracks, 2 stories, 108x39 feet; recreation building, 1 story, 80x30 feet; garage, 112x27 feet; armory, 66x25 feet; receiving station, 56x25 feet, and brig, 1 story, 51x25 feet. Asbestos shingle and tin roof, steam heating, electric

lighting, cement and maple floors, ventilators, cold water painting, kitchen equipment. Owners taking bids, due July 29th. Cramp & Co., Denckla Building, and Warren-Moore Co., Colonial Trust Building, Philadelphia, are figuring.

Garage, West State street, Trenton, N. J., \$2,000. Architect, Wm. Slack, St. Regis Theatre Building, Trenton, N. J. Owner's name withheld. Brick and stucco, 1 story, 36x32 feet, slate roof, stone foundations, concrete floors, electric lighting. Architect ready for bids, due July 27th.

Sun Parlor, West State street, Trenton, N. J. Architect, Wm. Slack, Trenton, N. J. Owner's name withheld. Frame, 1 story, 15x28 feet, tin roof, brick foundations, hot water heating, electric lighting, reinforced concrete, tile or marble floor. Architect taking bids, due July 27th.

NEW JERSEY Contracts Awarded

Pasteuring Plant, Morris Plains, N. J. Architect, E. H. Bent, State Capitol, Trenton, N. J. Owners, State Hospital for Insane, care of architect. Hollow tile and stucco, 1 story and 2 stories, 24x36 feet, asphalt shingle roof, shower baths, steam heating, cement floors, iron angles. Contract awarded to J. J. Lyons, Morristown, N. J.

School (alts. and add.), Trenton, N. J. Architect, E. H. Bent, State Capitol, Trenton, N. J. Owners, State Home for Girls, Trenton, N. J. Brick, 1 story, 16x16 feet, wing 24x24 feet, steam heating. Contract awarded to Finemore & Firth, Bordentown, N. J.

School, North Juliestown, Burlington County, N. J., \$7,000. Architect, Harry Hill, Tren-

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ton, N. J. Owners, School Board of Juliestown Township, care of Frank Bozarth, Clerk, R. F. D. Burlington, N. J. Frame, 1 story, 75x40 feet, pine floors, Waterbury heaters. Contract awarded to E. W. Esham, Mt. Holly, N. J.

Y. M. H. A. (alts. to 2 buildings), Sixth and Walnut streets, Camden, N. J. Architect, private plans. Owners, Y. M. H. A., care of Benjamin Natal, Court House Square Building, Camden, N. J. Brick and concrete, 2½ stories, 50x90 feet, slag roof, concrete. Alterations consist of tearing out partitions and leveling floors in two buildings. Contract awarded to Mocket Const. Co., Camden, N. J.

Administration Building and Garage, Camp Dix, Wrightstown, N. J. Architect, private plans. Owners, Jewish Welfare Works, Camp Dix, N. J. Frame, 1 story, 47x57 feet, ready roof, pine floors, stone foundations, electric lighting. Contract awarded to Kolb Portable Building Co., Hudson Terminal, New York City.

Houses (additional 1,000), Yorkship Village, Camden, N. J. Architect, Electus D. Litchfield, 477 Fifth avenue, New York City. Frame, stucco and brick, 2 stories, various sizes, slag, tin and composition roofs, stone foundations, hot air heating, electric lighting, pine floors. Owners, Construction Branch, Housing Department, Emergency Fleet Corp., 253 North Broad street, Philadelphia. Contract awarded to Tidewater Building Co., 16 East Thirty-third street, New York City.

Residence (alts.), 324 West State street, Trenton, \$1,200. Architect, Wm. Slack, Trenton, N. J. Owner, H. J. Stout, 324 West State street, Trenton, N. J. Brick, 3 stories, 18x58 feet, tin roof, hardwood floors, hot air heating, electric lighting roof ventilators, alterations consist of changing residence to two-family house. Contract awarded to Otis Johns, Trenton, N. J.

Miscellaneous Construction News

Houses (98), Naamans, Del. Architect, private plans. Owners, National Aniline Chemical Co., Marcus Hook, Pa. Brick and stucco, 2½ stories, 19x24 feet, slate roof, North Carolina pine floors, stone foundations, electric lighting, metal lath (heating reserved). Owners have received bids.

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MARYLAND Construction News

Store (alts. and add.), 821 East Baltimore street, Baltimore, Md. Architect, George R. Callis, Knickerbocker Building, Baltimore, Md. Owners, S. Blaustein & Bro. Co., on premises. Brick, two-story addition, ornamental iron work, hollow metal skylights, plastering, painting, plumbing, tile work. Owner is taking bids.

Buildings for Midshipmen, Annapolis, Md., \$3,500,00. Architect, J. H. de Sibour, Hibbs Building, Washington, D. C. Owners, U. S.

Government, care of Admiral Parsons, 1317 F street, Washington, D. C. Brick, stone, granite and marble, 3 stories, 16x163 feet, slag roof, steam heating, electric lighting, fire escapes, rolled steel sash, hollow metal skylights, ventilators, fireproofing, dampproofing, hollow tile, terra cotta, tile, marble, slate and terrazzo work, composition and hardwood floors, vacuum cleaning system. Plans in progress. Owners will advertise for bids in about two months.

MARYLAND Contracts Awarded

Ordnance Depot, Edgewood, Md., \$5,000,000. Architect, private plans. Owners, U. S. Government, War Department, care of Wm. H. Walker, Ordnance Department, 311 West Monument street, Baltimore, Md., for Edgewood Arsenal, Baltimore. Buildings (10), 200x100 feet, concrete, brick and steel. Contract awarded to Austin Co., Bulletin Building, Philadelphia, for foundations.

Manufacturing Plant, Cumberland, Md., \$10,000,000. Architect, private plans. Owners, The Cellulose Co., New York City. Steel, brick and concrete, 1 story buildings. Contract awarded to George A. Fuller Co., Fuller Building, New York City.

Dwellings (11), North Milton avenue, Baltimore, Md., \$10,000. Architect, private plans. Owners, Acme Building Co., 511 Equitable Building, Baltimore, Md. Brick, 2 stories, 13x42 feet, slag roof or tin roof, hot air heating, electric lighting. Owners are taking sub-bids.

Garage, Jessup, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore, Md. Owners, House of Correction, Jessup, Md. Concrete foundations, 1 story, brick, cement floors, slag roof, steam heating, electric lighting, painting and plumbing. Contract award-

ed to John Busiek, 2800 Raynor avenue, Baltimore, Md.

Garages (8), 2304 Entaw Place, Baltimore, Md. Architect, Fred Beall, 1335 Gilmer street, Baltimore, Md. Owner, Alex. Katzenberg, 1139 Pennsylvania avenue, Baltimore, Md. Brick, 1 story, 18x10 feet, slag roof, cement floors. Contract awarded to I. T. O'Leary, Baltimore, Md.

Lunch Room, southwest side of Fort avenue, at Fort McHenry, \$3,000. Architect, private plans. Owners, Baltimore, Drydock and Shipbuilding Co., Fort McHenry, Md. Steel and concrete, 1 story, 16x176 feet. Contract awarded to Dietrich Bros., Baltimore, Md.

Office Building, 416 East Lexington street, Baltimore, Md. Architect, J. Franklin Nelker, 330 North Charles street, Baltimore, Md. Owner, Robert Bros., Gay and Lexington streets, Baltimore, Md. Brick, stone trim, 2 stories, slag roof, steam heating electric lighting, hollow metal skylights, plastering, painting, tile work, plumbing. Contract awarded to P. J. Cushen, 217 St. Paul street, Baltimore, Md.

Shed, Pier 2, Light street wharf, Baltimore, Md., \$3,000. Architect, private plans. Owners, The Virginia and Carolina Navigation Co., 301 Maryland Trust Building, Baltimore, Md. Frame, 100x70 feet. Owners will build.

caster avenue, Philadelphia. Stone and brick, 1 story, 16x22 feet, tin roof, stone foundations. Garage, 5431 Wynnfield avenue, Philadelphia, \$3,300. E. G. Reysenthaler, Jr. (O), on premises. W. P. Johnson (C), 4039 Lancaster avenue, Philadelphia. Stone, 1 story, 34x24 feet, tin roof, stone foundations.

Garage, 3544 Ruth street, Philadelphia, \$400. S. Kingston Weber (O), 3545 Kensington avenue, Philadelphia. Geo. H. Evans (C), 45 N. Thirteenth street, Philadelphia. Brick, 1 story, 15x27 feet, slag roof.

Dwellings (2), Tinicum, west of Eighty-eighth street, Philadelphia, \$7,000. J. Sandberg (O), on premises. I. Kaplan (C), 8332 Eastwick avenue, Philadelphia. Brick, 2 stories, 16x34 feet, slag roof, hot air heating.

Garage, 740 Holly street, Philadelphia. John H. Rhoads (O), 738 Holly street, Philadelphia. Chas. Smith & Son (C), 4215 Haverford avenue, Philadelphia. Brick, 1 story, 13x60 feet, cement floors, galvanized iron skylights, concrete foundations.

Alterations and Additions

Dwelling, 3129 Richmond street, Philadelphia, \$2,000. Frank Curran (O), on premises. Borino Bonitalibus (C), East Thompson and Somerset streets, Philadelphia. Brick, 2 stories, 9x10 feet.

Store, 1117 Shunk street, Philadelphia, \$100. Abe Kaeh (O), 528 Reed street, Philadelphia. Abe Shestack (C), 528 Reed street, Philadelphia. Flush bulks.

Garage, 1944 McKean street, Philadelphia, \$475. John F. Seanlin (O), Twenty-third and McKean streets, Philadelphia. F. D. Dillon (C), 1223 South Twentieth street, Philadelphia. Alterations.

Garage, 4426 North Eighth street, Philadelphia, \$800. B. P. Cameron (O), on premises. Thos. J. Keely (C), 441 Germantown avenue, Philadelphia. Brick, 1 story, 12x20 feet, stone foundations.

Car Barn, Ridge avenue, above Port Royal avenue, Philadelphia, \$3,000. Redding Transit and Light Co. (O and C), Norristown, Pa. Slag roof, repair fire damages.

Factory, Sixth, south of Montgomery avenue, Philadelphia, \$2,000. R. McNeely (O), 1732 North Randolph street, Philadelphia. Stewart Bros. (C), 2546 North Orkney street, Philadelphia. Fire tower, 8x13 feet, brick, alterations.

School, south side of Grape, west of Silverwood street, Philadelphia, \$535. Polish Church (O), on premises. B. Klobukowski (C), 215 Baldwin street, Philadelphia. Alterations, 1 story, brick, 10x23 feet, stone foundations.

Rooming House, Eighteenth and Ridge avenue, Philadelphia, \$12,000. Ridge Avenue Farmers' Market (O), on premises. E. E. Holtenback, Inc. (C), 1804 Brandywine street, Philadelphia. Brick, four-story addition, fireproof roof, 11x33 feet.

Manufacturing Building, 108-10-13 Levering street, Philadelphia, \$3,700. Manayunk Plush Mills (O), 108 Levering street. C. W. Swartley (C), 6835 Ridge avenue, Philadelphia. Flush bulks.

Store and Dwelling, Gay and Cresson streets, Philadelphia, \$400. H. Enderline (O), Gay and Cresson streets, Philadelphia. C. M. Swartley (C), 6835 Ridge avenue, Philadelphia. Flush bulks.

Store, southwest corner of Fifteenth and Chestnut streets, Philadelphia, \$1,000. Colon-

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwellings (2), 911-13 Fillmore street, Philadelphia. John Fotheringham (O and C), Arrott and Castor Road, Philadelphia. Brick, 2 stories, 16x54 feet, hot water heating, slate roof, stone foundations.

Garage, 4635 Leiper street, Philadelphia, \$560. S. A. Ireland (O), on premises. M. Moister (C), 3931 North Fifth street, Philadelphia. Iron, 1 story, 18x20 feet.

Garage, 4905 Catherine street, Philadelphia, \$800. Joseph Allen Potts (O), on premises. M. W. Richey (C), 5008 Pentridge street, Phila-

delphia. Brick, 1 story, 16x18 feet, stone foundations, slag roof.

Tenement House and Stores, Broad and Belfield avenue, Philadelphia, \$20,000. Preston Butler (O), 5614 Germantown avenue, Philadelphia. Penn Realty and Const. Co. (C), Ogontz and Cheltenham avenue, Philadelphia. Slag roof, brick, stone foundations, 3 stories, 61x48 feet.

Garage, 2414 North Fifty-fourth street, Philadelphia, \$1,000. C. T. Evans (O), on premises. W. Percival Johnson (C), 4039 Lan-

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nade Hotel (O), on premises. Basch & Co. (C), 1426 South Front street, Philadelphia. Interior alterations.

Mill, Twenty-sixth and Spruce streets, Philadelphia, \$40,000. Cleveland Worsteds Mills (O), Twenty-fifth and Spruce streets, Philadelphia. F. A. Havens & Co. (C), 843 North Nineteenth street, Philadelphia. Brick, 1 story, 30x24 feet, elevator shaft, fire doors.

Tenement House, 3338 North Broad street, Philadelphia, \$1,000. D. H. Stroud (O and C), 3304 North Broad street, Philadelphia. Alterations.

Store, 1215 Race street, Philadelphia. M. Marks (O), Majestic Hotel, Philadelphia. A. H. Speard (C), 822 Wood street, Philadelphia. Alterations.

Garage, 3613-15 Wittee street, Philadelphia, \$750. Jos. Bander (O and C), Venango and Tulip streets, Philadelphia. Brick, 1 story, 36x36 feet.

Manufacturing Building, Decatur and P. R. R., \$80,000. Bessemer Motor Truck Co. (O), Grove City, Pa. Crowell-Little-Landoff Co. (C), Widener Building, Philadelphia. Brick, 1 story, 90x42 feet, concrete floors, kalamain doors.

Dwelling, 1540 Adams street, Philadelphia, \$610. E. Doutré (O), on premises. D. W. O'Dea (C), 5227 North Fifth street, Philadelphia. Brick, 1 story, 10x16 feet, stone foundations.

Storage Building, 434-36 North Third street, Philadelphia, \$1,800. Integrity Trust Co., trustees (O), Fourth and Green streets, Philadelphia. Church Eng. Co. (C), 1223 Filbert street, Philadelphia. Alterations.

Dwelling, 2003 East Cheltenham avenue, Philadelphia, \$685. William Skolnik (O), 2127 E. Cheltenham avenue, Philadelphia. Michael Kirschner (C), 421 Snyder avenue, Philadelphia. Front addition, 16x19 feet, of brick, 1 story.

Dwelling, Thirtieth, north of Locust street, \$600. Union Paving Co. (O), on premises. Pennsylvania R. R. Co. (C), Philadelphia. Repairs.

Crystallizing Room, Twenty-ninth and Gray's Ferry Road, Philadelphia, \$300. Henry Bower Chemical Co. (O and C), on premises. Rebuild wall.

Storage, 1131 Porter street, Philadelphia, \$300. Wm. Keifer (O and C), 1131 Porter street, Philadelphia. Brick, one-story addition, 15x8 feet, concrete foundations, concrete floors.

Work Shop, 1150 North Third street, Philadelphia, \$1,800. A. Gams (O), on premises. A. Johnson (C), 705 North Second street, Philadelphia. Brick work, alterations.

Printing House, northwest corner of Tenth and Lombard street, Philadelphia, \$1,500. Williams & Marcus Co. (O), 212 South Darien street, Philadelphia. Wark-Yardley Co. (C), 1737 Filbert street, Philadelphia. Water tank of 10,000 gallons capacity.

Store, 1031 Market street, Philadelphia, \$25,000. Frank & Seder (O), Eleventh and Market streets, Philadelphia. Warren-Moore & Co. (C), Colonial Trust Building. Bulk windows on front.

Garage, 1201-10 North Franklin street, Philadelphia, \$15,000. Wm. Bechtold Co. (O), 1202 North Franklin street, Philadelphia. George Kessler Cont. Co. (C), Drexel Building, Philadelphia. Minor alterations, cement floors, new steam heating, plumbing, new front of building, 1 story, brick, 14 feet high.

Carpenter Shop, northeast corner of Eighth and Lehigh avenue, Philadelphia, \$700. C. H. Wheeler Manufacturing Co. (O), on premises. J. N. Gill Co. (C), Otis Building,

Philadelphia. Brick, 1 story, 48x64 feet, stone foundations.

Store and Dwelling, 646 Cantrell street, Philadelphia, \$500. Joseph Cohen (O), 717 Walnut street, Philadelphia. N. Rozinsky (C), 520 Dickinson street, Philadelphia. Repair fire damages.

Wagon Shed, 1210 East Venango street, Philadelphia, \$375. John Tressell (O), on premises. M. Moister Co. (C), 3931 N. Fifth street, Philadelphia. Iron, 1 story, 16x18 feet.

Garage, 616 North Fifty-seventh street, Philadelphia, \$375. H. L. Truckness Co. (O), on premises. M. Moister Co. (C), 2931 North Fifth street, Philadelphia. Iron on iron, 16x16 feet, 1 story.

Machine and Pattern Shop, Sepviva and Erie avenue, Philadelphia, \$14,900. Savage Arms Corp. (O), New York City. Wm. F. Newberry (C), Otis Building, Philadelphia. Minor alterations and crane runway.

Residence, 2407 North Lehigh avenue, Philadelphia, \$400. H. G. Barry (O), 1420 West Master street, Philadelphia. A. F. Erwin (C), 1526 North Broad street, Philadelphia. Alterations.

Manufacturing Building, Torresdale and N street, Philadelphia, \$6,000. Louis Walther Manufacturing Co. (O), on premises. George H. Thirk (C), 1919 Berk street, Philadelphia. Brick, three-story addition, 60x140 feet.

Garage, 2202-4-6-8-10 North Bodine street, Philadelphia, \$1,700. Enterprise Manufacturing Co. (O and C), Third and Dauphin streets, Philadelphia. Alterations.

Dwelling, 856 North Twenty-second street, Philadelphia, \$1,100. Louis Hoyt (O), on premises. H. T. Campbell (C), 1222 North Twenty-ninth street, Philadelphia. Hot water heating apparatus.

Toilet Room, Ruth and Somerset streets, Philadelphia, \$8,000. Orinoka Mills (O), on premises. Wm. Steele & Sons Co. (C), Sixteenth and Parkway, Philadelphia. Toilet, 5 stories, 10x25 feet.

Manufacturing Building, Ruth and Somerset streets, Philadelphia, \$22,000. Orinoka Mills (O), on premises. Wm. Steele & Sons Co. (C), Sixteenth street and Parkway, Philadelphia. Brick, 1 story, 70x81 feet.

Office and Garage, Marston, north of Columbia avenue, Philadelphia, \$500. Charles Land (O and C), Twenty-eighth and Cambria sts., Philadelphia. Brick, 1 story, 16x21 feet, slag roof, stone foundations.

Building, Percy and Noble streets, Philadelphia, \$1,000. Edward E. Swift (O), on premises. A. R. Raff Const. Co. (C), 1635 Thompson street, Philadelphia. Repair fire damages.

Building, 13 and 15 Christian street, Philadelphia, \$13,000. Murphy-Cook Co. (O), Bourse Building, Philadelphia. Frank G. Stewart (C), 1619 Sansom street, Philadelphia. Brick, 1 story, L shaped, 35x25x111 feet.

Factory Building, 131 North Eleventh street, Philadelphia, \$850. Sophie Reimer (O), 2821 West Girard avenue, Philadelphia. John Codori (C), 1235 Arch street, Philadelphia. Brick, 1 story, 14x17 feet, wire glass, galvanized iron skylights.

Stone and Dwelling, 409 South Twelfth street, Philadelphia, \$450. Margaret Syren (O), 409 South Twelfth street, Philadelphia. John A. Codori (C), 1235 Arch street, Philadelphia. Repair bulged wall.

Residence, 1509 North Sixteenth street, Philadelphia, \$4,500. Flora Wasseman (O), on premises. Alfred Zellfelder (C), 151 South Broad street, Philadelphia. Interior alterations, 2 stories, brick, 6x16 feet.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETEEN PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Stable, Belgrade and Monmouth streets, Philadelphia. M. Feeney (O and C), on premises. Alterations, brick work.

Garage, 227 South Van Pelt street, Philadelphia, \$1,000. Frank Samuel (O), Harrison Building, Philadelphia. J. D. Fisher (C), 5424 Thompson street, Philadelphia. Brick, minor alterations.

Dwelling, 6114 Girard avenue, Philadelphia, \$400. John Hays (O), on premises. J. D. Fisher (C), 5424 Thompson street. Brick, 1 story, 13x8 feet, slag roof, stone foundations.

Dwelling and Store, Sixtieth and Spruce streets, Philadelphia, \$350. Berman Bros. (O), 6110 Market street. J. D. Fisher (C), 5425 Thompson street, Philadelphia. Flush bulks.

Store and Dwelling, 3837 Mount Vernon street, Philadelphia, \$650. A. Cohen (O), on premises. H. B. Hopperman (C), 611 South Sixth street, Philadelphia. Hot water heating system.

Garage, 2364 Orthodox street, Philadelphia, \$500. A. Mortezak (O and C), 2346 Orthodox street, Philadelphia. Brick, 1 story, 16x20 feet, slag roof, stone foundations.

Dwelling, 5641 Market street, Philadelphia, \$1,100. George Tudor (O), on premises. A. Gohn (C), 1552 North Fifty-fifth street, Philadelphia. Alterations.

Factory, East York and East Thompson streets, Philadelphia, \$3,000. Charles F. Datz & Co. (O), 482 North Fifth street, Philadelphia. Henry MacMillan (C), Eighteenth and Thory's Lane, Philadelphia.

Garage, 7041 Saybrook avenue, Philadelphia, \$490. Wm. Bader (O), 7040 Woodland avenue, Philadelphia. Geo. S. Roe (C), 6949 Saybrook avenue, Philadelphia. Repair fire damages.

Office and Drafting Room, Fourth and Lehigh avenue, Philadelphia, \$2,400. Kramer Woodworking Co. (O), on premises. Frank Doran (C), 2743 North Front street, Philadelphia. Steam heating system.

Dwelling, 134 West Master street, Philadelphia, \$700. Ed. Braun (O), 1416 North Fourth street, Philadelphia. Frank H. Stahl (C), 2713 North Park avenue, Philadelphia. Repairs.

Dwelling, 22 East Gowan avenue, Philadelphia, \$1,300. J. W. Landenberger (O), on premises. W. C. Wright (C), 22 Harvey st., Germantown, Philadelphia. Brick, 2 stories, 14x5 feet, tin roof.

Store and Dwelling, 1535 Columbia avenue, Philadelphia, \$2,700. S. Frank Smith (O), on premises. John J. Nichenki (C), 1639 North Eighteenth street, Philadelphia. Alterations.

Factory, 2713 North Palethorpe street, Philadelphia, \$1,000. A. Turkington (O), Front and Lehigh avenue, Philadelphia. Clayton Loftland (C), Water and Race streets, Philadelphia. Alterations.

Shed, Main street, south of Walnut Lane, Philadelphia, \$1,800. Manayunk Yarn Co. (O), on premises. E. L. Cuthbertson (C), 334 Roxborough avenue, Philadelphia. Alterations, 72x15 feet, 1 story.

Boiler House, Forty-ninth and Botanic avenue, Philadelphia, \$1,350. Geo. W. Smith & Co. (O), on premises. Drehmann Paving Co. (C), 2622 Parrish street, Philadelphia. Reinforced concrete slab on steel beams.

Banking House, Fourth and Chestnut sts., Philadelphia, \$850. Provident Life and Trust Co. (O), on premises. Drehmann Paving Co. (C), 2622 Parrish street, Philadelphia. Reinforced concrete floors.

ALIENS IN AMERICAN INDUSTRIES.

(Continued from Page 428.)

the Government when you help another employer protect his own plant.

Permits must be required by employees to go to different parts of the plant. A general tag is not sufficient. An alien enemy in one place may be a low risk; in another a high risk.

Appoint some employee as an aliens' captain in the plant and give him a committee if it is advisable. It will be his business to spot anti-American propaganda and sentiment, to make such shop plans and maps as have been suggested, supervise registrations, recommend transfers and have the guards and sentinels under his direction. Call him by any preferred name, but give him the whole job of looking after the safety of the plant from the man-power end.

Take a personal interest in the alien. If it is necessary, set up an information bureau to help him understand drafts and regulations and registration. If he wants to learn English and become a citizen, help him to do so. See that he gets American information on bulletin boards, in pay envelopes and otherwise, to offset the anti-American material sent him or told him. (Over 140,000 sets of civic lessons in foreign languages have already been handled by industries through pay envelopes.)

When this intelligent handling of alien enemy and those of doubtful loyalty is in operation, the plant is ready for another step—the systematic removal of every possible cause for unrest, dissatisfaction, disloyalty and disturbance. This will require a close contact with the workman, and another analysis of the plant, if not a map. Is it wages, or hours, or foremen or the employing and dismissal method, housing or substitution of women? Whatever it is, it constitutes the medium through which the German agents work and it is their chief stock in trade next to the love for the fatherland. In dealing with German spies, a plant has to be fool proof as well as bomb proof. The man who strikes may think it is bad housing or treatment; the German propagandist knows it's German efficiency playing through American negligence and carelessness.—“American Industries.”

FEDERAL EYES ON CONSTRUCTION.

In order to cause no embarrassment to Government construction, the tendency at Washington is more and more toward centralizing effort in the direction of essential construction only, with the idea of conserving as much as possible available building material.

It would not be a question of circumscribing building construction at all if it were assured that there will be enough fuel available to permit building materials to be manufactured in normal quantities, but the Federal authori-

ties are confronted with the problem of supplying an army at least double in size that originally contemplated, and the whole estimate of the quantity of building construction the various Government branches will require this summer and autumn had been set at a point far below the new necessities.

Recent reports on the supplies of building materials at various distributing points show stocks very little in excess of the total amount the Government authorities thought they would need, with the result that with the enlarged military and naval programs it is not known just how the various building material producers will be able to meet the emergency if ordinary building work is permitted to proceed. It is apparently not the intention of the authorities to issue a blanket order to stop all building construction save that only of Government origination, but until some idea can be obtained as to just how much building material is available those contemplating private non-essential construction work are being requested by letter from the proper authorities to defer their operations for the moment.

Some idea of the pressure that is already being levied upon some materials was evidenced in the trade recently when it became known that it might be necessary for the Government to take over the steel-producing capacity of the country.

One of the first things that the Government will determine is whether there is sufficient building material on hand to take care of wartime requirements and at the same time permit a reasonable quantity of private construction work to proceed. As far as the Eastern seaboard is concerned the building material supply is in requisition now for quantities far in excess of the amount needed for construction in the entire year 1913, when the metropolitan district of New York had 18,394,000 square feet of construction work planned and going ahead, while Government construction on only two Government operations at present call for two structures which combined represent almost 12,000,000 square feet, and this does not include cantonment enlargement and new terminal construction facilities. In 1913 there was almost an over-supply of building materials, whereas to-day the quantities of building materials in this district are less than 50 per cent. of normal.

There is no hope of increasing this supply unless fuel deliveries can be guaranteed. Happily the outlook for improvement in fuel supply is brightening, as the situation is being demonstrated to the authorities at Washington.—“Electrical Contractor-Dealer,” New York.

If your sales-talk is keyed to interest men who build it should occupy space every week in the “Guide,” the only building magazine this side of Manhattan Island.

Our specialty is Portland Cement that will stick and pass the City Department. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

SYSTEMATIZING THE BUILDING OF WORKMEN'S HOMES.

By Daniel J. Hauer.

If a man can build one house, cottage or bungalow, is he not competent to build a hundred such houses at one time? The answer is yes; but thereby comes a discussion, for there are a number of ways and methods of handling the building of a house and numerous ways to proceed in building a hundred or more houses.

During the past eighteen months the erection of buildings for the Government for many purposes has been carried on in an unprecedented manner, and upon a scale unheard of in this country, even where we have been accustomed to doing construction on a large scale. There have been contracts let for more than a thousand buildings, each with necessary water supply, sewerage system, roads, sidewalks, lighting system, and other details to make a complete town or community. Those built last year were for the soldiers, cantonments of barracks, offices, warehouses, etc., while this year in addition to these and various terminals, there are numerous housing propositions for caring for the workmen and their families, for many manufacturers engaged upon Government contracts.

The first idea of many contractors and builders is to repeat the operation of erecting a single building, by employing large forces of mechanics and laborers and by the so-called "speeding method" build a large number of cottages within a given time. This is being done in many instances. Carpenters are put to work on different buildings just as though there were but one or two buildings to be erected.

Thus men are placed so close that they frequently interfere with one another. The material that one or two men may be using may impede the progress of half a dozen, so that such material may have to be moved and handled several times. The cost of supervision is high, as it is difficult for a foreman to look after many men. Time is taken up with changing men from one kind of work, as they finish it, to another, and in showing mechanics how work should be done, and having mistakes rectified.

Much work that is done is bound to be poor or not according to plans; and although a single building may be erected quicker in this fashion, yet the cost for labor and waste material will be higher, and the entire project cannot be done in as quick time, as when the construction is done along systematic lines and according to the most approved modern management.

A short outline will show how both time and money can be saved by following the proper system.

The first consideration is to obtain and properly distribute the construction materials. This is the most important feature of the entire undertaking. A lack of material means

not only a delay but a break in any well thought out plan or system of building. The material once obtained must be properly distributed. The success of the job will depend upon this.

Take the proposition of erecting two hundred houses—ten of these to be boarding houses of twelve rooms, twenty to be eight-room cottages, forty to have six rooms and the rest five-room houses. Thus there are four types and sizes of buildings. Forces can be organized to work on each type or size of house. If material in plenty for all the houses is being received, then the gangs or crews can be so arranged as to number and size that they can finish all the buildings of each type at about the same time.

Power saws, boring machines and such tools for working up the material can be arranged, conveniently to material yards or points of receiving materials, so as to work up much of these materials without interfering with the construction of the buildings. If some 2x10-inch planks are to be cut 16 inches long, and altogether 800 of such pieces are needed, it is evident that these can be cut up by one operator on a saw, and the pieces can then be hauled and enough for each building delivered to it and neatly piled until used.

This is a common practice, as it saves time and money. Consequently if this can be done, then it is just as practical to cut a thousand roof rafters of 2x6-inch plank 16 feet 9 inches long and deliver them in the same manner to the buildings. Thus it becomes only a step to have framed and cut in this manner the greater part of all the material to be used, except special pieces or something that must be measured and fitted at the building.

It is this that starts the system. Some carpenters and mechanics are given the job of framing alone, others that of erecting. As a man running a power saw and cutting a piece of timber to a certain length, with notches and at given angles, is able to repeat this operation a thousand times if necessary, better than another who must start at it anew, so it is logical for another mechanic to place floor joists over and over again on the same type of building, while another set erect studding, a third place roof framing, another flooring and so through each class of work.

This is the logical and practical system of erecting houses in large numbers. It means the repetition of the same operation by the same men as often as possible. It means the cheapening of work; the speeding up of a job with the greatest economy; the saving of much material; the lowest percentage of mistakes; the best workmanship possible; the handling of large bodies of laborers and mechanics with the least supervision. It means better satisfied workmen, and the easy selecting of competent mechanics.

The actual planning of carrying on such a job must depend upon the plan and character

of the building to be erected. The crews and their tasks can only be decided upon from the plans. A few mistakes may occur, and for the first few weeks some changes may have to be made in the arrangement of the men and their number, but this is insignificant as compared to the numerous changes made in the crews during each day and for the entire life of the job. The building of workmen's homes is a large problem and one that will occupy the attention of many builders for several years.—"National Builder."

A SUBSTITUTE FOR CORRUGATED IRON.

The British are now manufacturing a satisfactory substitute for corrugated iron and sheets. It is an asbestos-cement roofing material. The method of making it is as follows: After being finely ground and freed from extraneous matter the asbestos, which acts as the reinforcing agent, is mixed with Portland cement in the proportion of about 1 to 6, and made into a paste with water. This paste is then taken to a machine of the paper-making type, where, on a large revolving drum, it is formed into sheets or felts. After the sheets have been trimmed to size they have the corrugations impressed on them. The important condition for this operation is to insure that the tops of the corrugations are as strong as the other parts of the sheets. Finally the sheets are subjected to a "seasoning" process. The corrugations are made to the 3-inch pitch which is usual with corrugated iron sheeting, not to the 2½-inch foreign pitch, and they can therefore readily be used to repair roofs of corrugated iron. One of the chief advantages claimed is their durability and resistance to climatic conditions, especially to an acid-laden atmosphere, which rapidly destroys corrugated iron. The sheets are also fireproof and are poor conductors of heat.—"Brass World," New York.

MAINTENANCE.

Good company developments are found to be greatly marred by a failure to maintain the houses and their surroundings properly. Relatively poor housing accommodations are redeemed to an extent by a good system of upkeep. Employers are practically one in their belief that problems of maintenance are the most important ones for the success of any housing undertaking. The old style type of miner's house in anthracite and bituminous regions of Pennsylvania is being rejuvenated, by repainting and repair, construction of whitewashed fences, the planting of trees and shrubbery, systematic garbage collection, etc.—"National Builder."

The man who doesn't advertise, these days, is forgotten. The world is too busy to look up dead ones.

Portland Cement, Sand or Gravel by the carload. Consult DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.		Floor Plates.		Refrigerators.	
Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.		Alan Wood Iron and Steel Co., Widener Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.	
Ridpath & Potter Co. Bourse Bldg., Phila.		Furnaces and Ranges.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.	
John B. Rulon. 1355 Colwyn st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Reinforcing Bars.	
Artists' and Architects' Supplies.		Henry M. Miller. 46-48-50 N. 2d. st., Phila.		Truseon Steel Co. Commonwealth Bldg., Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Richardson and Boynton Co. 1332 Arch st., Phila.		Roofing.	
Warren-Knight Co. 136 N. 12th st., Phila.		Garage (Portable)		The Barrett Co. New York City and Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Service Equipment Co. Bourse Bldg., Phila.		Roofing Tile.	
Blue Prints.		Granite.		O. W. Ketcham. Builders' Exchange, Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Holmesburg Granite Co., Commercial Trust Bldg., Phila.		Scales.	
F. Weber & Co. 1125 Chestnut st., Phila.		Hauling Contractors.		The Fairbanks Co. 7th and Arch sts., Phila.	
Blue Print Paper.		Barber Contracting Co., 1127 Land Title Bldg., Phila.		Sewer Pipe and Flue Linings.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Heating Contractors.		C. F. Shellenberger. Builders' Exchange, Phila.	
Brick (Face, Etc.).		Bowers Bros. & Co. 1629 Ludlow st., Phila.		Sewage Disposal.	
O. W. Ketcham. Builders' Exchange, Phila.		Heating Boilers.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Brick Renovating.		Borden Stove Co. 1311-13 Arch st., Phila.		Soundings.	
Adolph Christensen. 1433 Brown st., Phila.		Fleck Bros. Co. 44 N. 5th st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Builders.		Richardson and Boynton Co. 1332 Arch st., Phila.		Ridpath & Potter Co. Bourse Bldg., Phila.	
Hogg Construction Co., Inc., 1634 Sansom st., Phila.		Insurance.		John B. Rulon. 1355 Colwyn st., Phila.	
Mitchell Bros. 1125 Bace st., Phila.		Harris J. Latta. Penna. Bldg., Phila.		Sprinklers.	
Pomeroy Const. Co. 1609 Banstead st., Phila.		Insurance Co. of North America, 3rd and Walnut sts., Phila.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Builders' Supplies.		Lighting Fixtures.		Surety Bonds.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Staman & Dickey. 30 S. 16th st., Phila.		Harris J. Latta. Penna. Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		Lumber.		Terra Cotta (Architectural).	
Builders' Equipment.		James E. Tague & Co., 10th and Columbia ave., Phila.		O. W. Ketcham. Builders' Exchange, Phila.	
Service Equipment Co. Bourse Bldg., Phila.		Marble Mosaic.		Test Borings.	
Cement.		Belf Bros. & Co. 1923 Market st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
P. H. Fairlamb Co. 115 S. 30th st., Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.		Ridpath & Potter Co. Bourse Bldg., Phila.	
David France Co., Tasker st. wharf, Delaware River, Phila.		Metal Lath.		John B. Rulon. 1355 Colwyn st., Phila.	
Lehigh Portland Cement Co., Finance Bldg., Phila.		General Fireproofing Co., 832 Arch st., Phila.		Tile and Terrazzo Work.	
Columns (Metal).		Pearce Fireproof Co. 1345 Arch st., Phila.		Belf Bros. & Co. 1923 Market st., Phila.	
Pearce Fireproof Co. 1345 Arch st., Phila.		Truseon Steel Co. Commonwealth Bldg., Phila.		Italian Marble Mosaic Co. 433 Spruce st., Phila.	
Composition Flooring.		Meters.		Ventilators.	
The Barrett Company, New York and Philadelphia.		Philadelphia Meter Co., Real Estate Trust Bldg., Phila.		Merchant & Evans Co., 2035 Washington ave., Phila.	
Philadelphia Mineral Flooring Co., 5632 Summer st., Phila.		Mill Supplies.		Wall Board.	
Woodolcum Manufacturing Co., 203 Liberty Bldg., Phila.		The Fairbanks Co. 7th and Arch sts., Phila.		Cell Board.	
Dampproofing.		Service Equipment Co. Bourse Bldg., Phila.		James E. Tague & Co., 10th and Columbia ave., Phila.	
The Barrett Co. New York City and Phila.		Paints and Varnishes.		Water Paint.	
Drawing Materials.		The Barrett Company, New York and Philadelphia.		Wm. B. Southern, N. W. Cor. 12th and Spruce sts., Phila.	
Charles H. Robbins. 125 S. 11th st., Phila.		Felton, Sibley & Co. 136 N. 4th st., Phila.		Waterproofing.	
F. Weber & Co. 1125 Chestnut st., Phila.		Pipe Fittings and Valves.		The Barrett Co. New York City and Phila.	
Electrical Construction.		The Fairbanks Co. 7th and Arch sts., Phila.		Water Supply.	
Baird-Osterhout Construction Co., 1620 Chancellor st., Phila.		Plumbing Fixtures.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Elevators.		Fleck Bros. Co. 44 N. 5th st., Phila.		Weather Strip (Metal).	
A. B. See Electric Elevator Co., Colonial Trust Bldg., Phila.		James A. Vogel Co. Wilmington, Del.		Diamond Flexible Metal Weather Strip Co., Geo. R. C. Johnston. Drexel Bldg., Phila.	
Engineers' Supplies.		Keystone Supply & Mfg. Co. 913 N. 9th st., Phila.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
Charles H. Robbins. 125 S. 11th st., Phila.		Preservatives (Wood and Concrete).		Window Screens.	
Warren-Knight Co. 136 N. 12th st., Phila.		The Barrett Co. New York City and Phila.		C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.	
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1792

1918

Insurance Company of NORTH AMERICA

PHILADELPHIA



126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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Vol. XXXIII., No. 31
July 31, 1918

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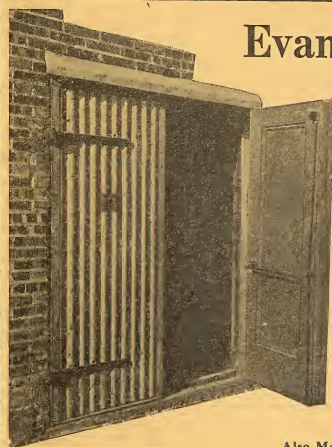
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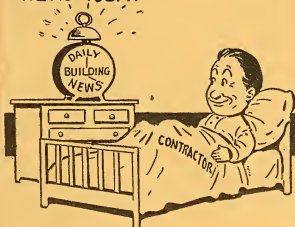
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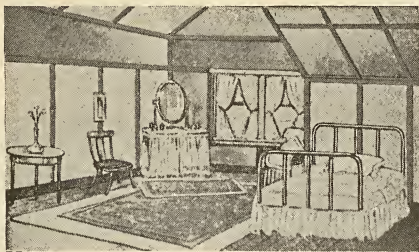
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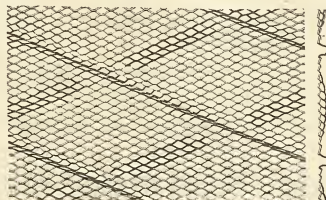
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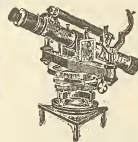


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PHILADELPHIA

July 31, 1918

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FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

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As The Editor Sees It



THE building situation assumes from day to day a more encouraging aspect. Many factors, bearing both directly and indirectly on the building industry are contributing to a more satisfactory building outlook.

The relation which exists between building and agricultural prosperity lends interest to the promised increase in the wheat and cotton yields. In May, 1917, the cotton yield was about 12,500,000 bales and the estimated yield for May, 1918, is 15,650,000 bales. A 40 per cent. increase in wheat is predicted, 587,000,000 bushels being predicted for May, 1918, against 418,070,000 bushels, the figure for May, 1917.

As regards actual building, the Government projects begun during the past few months show a most satisfactory increase. The figures for this sort of construction in May are \$43,305,000 and in June \$125,005,540, showing an approximate increase of 300 per cent.

Construction other than Government work is also advancing very satisfactorily. Many civilian projects which were deferred during the first few months of the war chaos have now been begun. The industrial building now being begun is practically all primarily for war purposes. In May the amount expended for buildings of manufacturing types was \$69,127,420, while in April the amount for this kind of building was only \$17,857,000. Industrial building during June is represented by a volume of \$24,296,000, greater than any other single month

of either 1918 or 1917 with the exception of the month of May, just mentioned.

In view of the long recognized inadequacy of existing housing, it is not surprising to find a gradual increase in residential building. The advance from \$31,521,600 for May to \$37,330,452 for June shows an approximate increase of 20 per cent. and is higher than the figure for June, 1917.

Several weeks ago we predicted that the worst period of building depression had passed. The need for all kinds of building, governmental, industrial and residential was too urgent to be deferred for any length of time; moreover, the need for building of all description was of utmost importance in running the war and the need had to be met. Now that co-operation between the Government and building organizations has been established and cemented, construction work should play an important part in the win the war campaign.

* * *

HOW the housing situation can be sanely considered, and most competently coped with is very well illustrated by the experience of the town of Canton, Ohio, as told by Mark Hambleton in the *National Builder*.

"In any discussion of our home building campaign, the fact should first be established of Canton's unwavering patriotism and its hearty support of the Government in all war activities. There has

been no thought of competing with the Government for men or materials needed in war work; while the fact that Canton is an over-subscribed city in an over-subscribed state, so far as Liberty Loans are concerned, should be sufficient evidence that we are willing to give of our money, too, in the righteous cause of making the world safe for democracy.

But taking all these things into consideration, we have not been able to get away from this additional fact, for it has forced itself upon our attention at almost every turn; that Canton needs 2500 new houses this season to house its steadily growing population; indeed it must have them if its industries—most of them legitimate and useful industries even in war time—are not to be seriously hampered. Our population has increased approximately 10,000 during the past year, and a growth of equal size is anticipated for the present year.

It has been well said that the war cannot be won by the men at the front alone. Behind the fighters there is required a vast organization, supporting and supplying them. Men, munitions, hospital supplies, food, comfort and even cheer must be kept moving forward in ceaseless streams from the great reservoir at home. That the reservoir may be equal to these demands upon it, challenges the nation's patriotism and forethought. To this end, the administration has commandeered, and has had ready response from the best intelligence of the country.

It is probably true that a lot of the

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attempts to shut off industrial activity, to curtail trade and cripple commerce, are merely the result of silly sentimentality, but some of them unquestionably are Prussian propaganda.

In one of these classes or the other—and it does not matter much which—belongs the effort that has been made in recent months to curtail the legitimate building activities of the nation.

War necessarily shuts off purely speculative building operations. In fact, it renders them quite impossible without any prohibitory legislation; and this is as it should be. But the American people today stand in actual need of many millions of dollars' worth of building improvements that are in abeyance largely because a few people who pose as economists, but who in reality are either thoughtless or pro-German, have hinted that it is unpatriotic to proceed with such projects under present conditions.

No building project ought to be undertaken during the war if its prosecution will hinder the Government by taking either materials or labor needed in war work. That is axiomatic Americanism. But no legitimate building project should be deferred if it can be carried into execution without interference with the country's war work.

Many paper-analysts have jumped to the conclusion that because England was forced to curtail building early in the war the United States must do likewise. They have overlooked the fact that England's situation and ours are in nowise alike.

How do they differ?

Before the war, England imported building materials to meet her requirements—steel from the United States, France, Belgium and Germany; cement from the same sources; timber from the Baltic and from North America. A continuance of building after the exhaustion of the stocks on hand at the beginning of the war would have meant the continuance of imports of materials. Every foot of cargo space obtainable was needed for imports of foodstuffs and munitions. Obviously, under such conditions as this, building must yield.

The problem with England was one of defense against sudden and violent onslaught, for which the nation was almost wholly unprepared, and the obvious thing to do was to draw into active service every able-bodied man who could be induced or forced to serve, barring only those needed to maintain war industries.

The building industries and trades of the United States furnish a living to hundreds of thousands of men and women who are not now needed for war service, but whose ability to provide for themselves and to help carry the financial burdens of the war is of the highest consequence.

The fabrication of materials used in

building, in the aggregate, represents an industry capable of paying in taxation the cost of maintaining a great army. But a dead or dormant industry is not taxable.

If the industries and labor dependent on building are to stagnate until peace comes, the country thereby must lose one of its great war resources, the ability of those industries and that labor to produce revenue for the furtherance of the war.

The figures which I have given as to Canton's needs are not a haphazard guess, but are based on a careful survey, made by our Commission and by the Canton Chamber of Commerce before this Commission was organized. In fact it might be stated right here that the Canton Home Building Commission was brought into being under the auspices of the Chamber of Commerce as a result of its investigations, and cannot be blamed upon any set of supposedly selfish real estate promoters.

The various surveys have also provided us with other interesting data. They have given us a fairly accurate line on the stocks of building materials on hand in the city or immediately available, for one thing. And this is a most important item; for it shows what our resources are, without asking the aid of the railroads to bring in new materials. In the lumber yards of Canton, for instance, we found enough lumber actually on hand to build several hundred houses complete. We also have in our territory a number of factories for the manufacture of clay products, such as brick and structural tile; we have a cement plant only six miles away; we have steel plants which can provide sheet steel for roofs if needed; and we have good roads over which all of these materials can be assembled by motor haulage.

But materials are not the whole of the problem. To build, one must have labor; and we are told that able-bodied builders ought to be building ships or otherwise aiding in the great world struggle. True; but there are in Canton a seemingly unusual number of building mechanics who are past their prime—men who would not be accepted on Government work, and indeed many of whom would be pushed aside even in the general run of building in ordinary times. But they are men who have several good hours of work in them each day; and they can earn better money, and maintain greater self-respect, by building the homes so sorely needed in the city than by doing the ordinary odd jobs to which the old men are relegated, beside feeling that in this way they are allowing younger men to go to the front and are thus indirectly but none the less effectively doing their bit to down the Huns in their attempted conquest of the world.

With these facts in hand; with the knowledge that Canton had the money to build homes to the limit of our needs if it could be brought from under cover; and with a fund of a few hundred dollars which had been subscribed by public-spirited citizens, our Commission launched a publicity campaign to stimulate the building of homes. We bought space liberally in the newspapers, starting out with full pages; and in addition we have all along had the generous and hearty editorial support of the papers, giving the widest publicity to our activities and emphasizing the needs for house building. We have advertised, too, by means of window cards, circulars, and other means. We have secured letters from housing experts in various parts of the country, and have given these wide publicity. We have brought men from other towns to Canton to address public meetings, telling us at first hand some things about the household situation as it has worked out in their own experience. One of these men was O. E. Hawk of Youngstown. The papers gave large space to a report of his talk before the Real Estate Board. Among other things he said:

The conditions of housing in your city and mine, whether it be a normal or an abnormal shortage of houses, is only the acute manifestation of a chronic disease, which has been gathering its germs through years of underbuilding—through years of little attention to this civic need. It is a condition which has always existed in industrial centers, but it seems that only war could make us see it.

I am informed that from a survey you have made you discover an immediate need for 2500 homes in your city, and from your building permits you have been building an average of 550 homes per year. This is hardly enough to take care of the natural requirements for additional homes, which a population the size of yours will need each year for young people who will enter married life and who will prefer their own homes, independent of their family connections, not saying anything about the provision for the new comer and his family, whom you should encourage to make your city his permanent home.

Statistics show that at least 2 per cent. of the population each year enter married life; this would indicate that you will need to provide 1400 homes for your newlyweds alone.

It is therefore apparent that your city must do something immediately to supply the needs of the present situation; and if it expects to continue its permanent, healthy growth, and keep its place among the cities of our nation, this building must be continued on an increased scale, for through this process only are

you able to retain your present wage earners and supply the necessary labor required for the operation of your industries.

We have opposition to building on account of high prices and the fear that after the war prices of labor and material will decline. For fifteen years I have advocated that there would be an increase in the cost of producing any type of home and my opinion is, that if I live I will be preaching the same doctrine in another fifteen years. I believe that land and building lots are cheaper today than they will be in the future. My judgment is that by reason of your sound and advanced position today that real estate offers a more attractive investment during the next ten years than it produced in the ten years just passed because your country is going to make progress, you will build more permanent buildings and more permanent improvements of all kinds.

The war has shown that no nation can be free until all nations are free; and in the same reasoning we must see that no man can be free until all men are free. Therefore, we must go on fulfilling our duty of promoting and encouraging home owning and making them become a partner in the affairs of our country, for only through this channel, in my judgment, can we effect a permanent remedy for the conditions of housing which exist and provide a dependable supply of wage-earners for our communities. This will stop most of the keen competitive bidding for laborers' services from other cities; for a man will not easily be lured away from the city which provides everything he needs and in which he has a comfortable home for himself and family, which he is purchasing on some installment plan within his ability to pay.

The people as a whole are to blame for the conditions that now exist in your community and mine, of whatever nature it may be, and as the people as a whole are to be benefited by the improvement of that condition, therefore, the people as a whole should lend their support, encouragement and finances to improve that condition.

The time has come when we must raise the home to the dignity of an economic factor in our community and national life; for we see the need for homes and decent living conditions as we could never measure them before, and we must not be led to believe that this question is only a war problem, for nothing is more certain than that it will last over into peace.

It was gratifying to us that Mr. Hawk dwelt at length on the fact that building will not be cheaper, for this is one of the main things which has retarded

building so seriously, and which we have tried to combat in our campaign. By hammering on this persistently we will not only get the prospective owner to understand it, but will also get it before the capitalist in such a light that he will be willing to put his money into this kind of investments. For the principal objection that there has been in recent months to so invest is the fear that after the war is over the cost of building will be so reduced as to depreciate the value of such investments and render them unsafe. The impossibility of such a condition is now beginning to be generally realized over the whole country, and has been placed before our own citizens very forcibly in the publicity matter which we have sent out. With this basic fact generally understood—that building will not be cheaper for many years to come, if at all—the atmosphere will be pretty effectually cleared, and then building can go on with reasonable regularity.

So, as will be noted from advertisements, we have been advertising principally along two lines: the needs of our city with reference to homes, and the advantages of home mortgages to investors. That is, we want to get people into the notion of building, and we want to supply them with the money to finance the work. In order to do this latter, it is many times necessary to go to the individual investor rather than working through banks.

Steps have also been taken to secure investments by people outside of Canton; and it is a possibility that eventually a financing corporation will be formed to handle the financing of home building in a systematic way. This will be entirely apart from our own Canton Housing Commission, which is not organized for profit and is interested only in developing a sentiment in favor of home building and crystallizing it into action.

We have in our campaign published all sorts of legitimate publicity matter. We have had news matter, articles on various phases of the situation by prominent citizens, and even stories, and dialogues between imaginary people in which they argued the home building question pro and con, of course finally arriving at the decision that it was a good time to build.

We want to get the present workers in the city comfortably housed in homes of their own, so that when the war is over and the period of industrial readjustment comes, they will want to stay here and form a part of our permanent population. The man with his own fire-side is a partner in the town, state and nation. Home ownership is the only solution of the tenement problem, for a citizen with a substantial home makes a permanent resident, a better working man, and is an accumulator of life's goods.

Canton has a large percentage of home owners and to this condition may be attributed much of its progress. The home owner automatically becomes a guardian of the public weal. However humble, the bit of ground and house that a citizen owns is a mighty force in making him a desirable resident. The experienced eye may detect instantly the home that is owned by the tenant and the one that is the property of an absentee landlord. The renter, no matter how ambitious for a pretty place, does not feel justified in paying for improvements and upkeep. On the contrary, the home owner will make sacrifices in other lines to bring his home nearer his ideal.

In Canton we not only have done all we could to encourage home buying, but buying at home as well. We want all of our people to patronize the factories that are doing business here. We are trying to make the home market the greatest market for all our producing concerns, and thus increase property values for home builders.

DOOR BED NOT PART OF BUILDING.

A door bed is not a part of the building in which it is installed and may be sold under a lease contract the same as any piece of movable furniture, according to a decision handed down by Judge Taft in the Superior Court of Los Angeles County. The decision was rendered in a suit brought by C. C. Hurd, trustee, and Laura E. and C. F. Borton, owners, to restrain the Southern California Hardwood and Manufacturing Company from removing the Murphy door beds which it had installed in the Blackstone apartments on Olive street near Third street under a lease contract with Laura E. Borton. It is probable the case will be appealed.—'Architect and Engineer.'

STEEL FRAME BUILDING ERECTED AT RATE OF 1 FLOOR EVERY 2 1/4 DAYS.

In the construction of the steel frame for the Statler Hotel at St. Louis, Mo., last year steel erection proceeded at the rate of two floors every 4 1/4 days. The building is 150x130 feet, 20 stories high and contains 4,500 tons of steel, 700 tons of which were used in the basement. A 10-hour shift was worked for the first few weeks. The steel erection was done with two 12-ton guyed derricks each having a 150-foot steel mast and 900-foot steel boom, and each served by a 200 H. P. Thomas electric hoist. The derricks were specially designed for the work and were built by the Minneapolis Steel and Machinery Company for the International Steel Erection Company, Waukesha, Wis., the contractors for the erection of the steel work.

The impractical dreamers are not the architects, but the clients themselves, as a rule.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Magazine Building, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Brick, steel and concrete. Plans in progress. Too early for details.

Case Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Brick, steel and concrete. Plans in progress. Too early for details.

Torpedo Testing Plant.. League Island, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete, 1 story, 18x20 feet, ready roof, cement floors, steam heating, rolled steel sash. Owners have received bids.

Store (alts.), 1015 Market street, Philadelphia. Architects, Hoffman Co., Finance Building, Philadelphia. Owner's name withheld. Interior alterations. Architects taking bids. Ketcham & McQuade, 1029 Brown street, are figuring.

Hospital (alts.), Second and Luzerne sts., Philadelphia. Architect, private plans. Owners, Department of Public Health and Charities, care of Wilmer Krusen, M. D., Director, 584 City Hall, Philadelphia. Roofing and sheet metal work. Owners taking bids, due August 5th at noon.

Residence, 750 South Fifty-second street, Philadelphia. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Dr. L. Bloomberg, care of architect. Brick, 3 stories, 16x70 feet, slag roof, hot water heating, electric lighting, pine floors. Architect taking bids. Albert Zellfelder, 151 South Broad street; David McClelland, 4011 Baring street; Frank Lucei, 1551 Christian street, and Frank Nardi Co., 1228 Fitzwater street, are figuring.

Dry Kiln and Lumber Storage Shed, Philadelphia, Pa., Spec. No. 3235, \$125,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Owners taking bids, due August 12th.

Temporary Timber Storehouse, Spec. 3242, Navy Yard, Philadelphia, \$170,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Owners taking bids, due August 5th.

Factory (add.), Sixth and Columbia avenue, Philadelphia. Architects, Day & Zimmerman, 618 Chestnut street, Philadelphia. Owners, Henry Sheip Manufacturing Co., Sixth and Columbia avenue, Philadelphia. Frame loaves. Architects taking bids. A. B. Raff Cont. Co., 1635 Thompson street; Sutton & Stephenson, 1317 Washington avenue; Barclay White & Co., 1713 Sansom street; F. A. Havens & Co., 845 North Nineteenth street;

J. Sims Wilson Co., 1125 Brown street, and N. W. Ellis, Columbia avenue, near Seventh street, are figuring.

Theatre (alts.), 1628 East Passyunk avenue, Philadelphia. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Alhambra Theatre, on premises. Interior alterations. Plans in progress.

Battery Storage Building, Spec. 3252, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Hospital, Seventh and Delancey streets, Philadelphia. Architects, Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babies' Hospital of Philadelphia, care of Mr. Davidson, 1713 Walnut street, Philadelphia. Fireproof, brick and granite, steel and reinforced concrete, 6 stories and basement, 40x81 feet, slate and cement roof, stone foundations, steam heat, electric light, tile and marble work, rolled steel sash, fireproof doors, cement and composition floors, metal

lath, elevators, metal window guards, waterproofing (heating, plumbing, sterilizers, refrigerators, incinerators, ranges, kitchen cabinets, electric wiring and electric elevator reserved). Architects taking revised bids, due July 31st. Wm. R. Dougherty, 1610 Sansom street; Robert E. Lamb Co., 843 North Nineteenth street, and F. B. Davis, 240 North Sixteenth street, are figuring.

Men's Toilet and Locker Room, Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel and Ordnance Co., Widener Building, Philadelphia. Brick and concrete, 2 stories, 16½x65 feet, gypsum and slag roof, cement floors, concrete foundations, steam heating, rolled steel sash, safety treads, waterproofing. Owners taking bids, due as soon as possible. Irwin & Leighton, 126 N. Twelfth street; Austin & Co., Bulletin Building; Barclay White & Co., 1713 Sansom street; W. W. Lindsay & Co., Harrison Building; F. W. Mark Cont. Co., Finance Building, Philadelphia, and Levering & Garrigues, 556 West Twenty-third street, New York City, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Store and Dwelling, northwest corner of Seventh and Poplar streets, \$5,000. Architect, Herman H. Kline, Sixth and Mifflin sts., Philadelphia. Owner, Samuel Horwitz, northeast corner of Seventh and Poplar streets, Philadelphia. Stone foundations, brick, 3 stories, 12x13 feet, addition, slag roof, electric lighting, hot water heating, plumbing, hardwood floors, metal lath, metal ceilings. Contract awarded to Scheetman Bros., 1734 N. Seventh street, Philadelphia.

Garage, 997-999 North Fifth street, Philadelphia, \$10,000. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Michael Rock, Jr., 826 East Allegheny avenue, Philadelphia. Brick, 1 story, 38x229 feet, slag roof, stone foundations, electric lighting, steam heating, office fixtures, 2-inch plank floors, cement work, hollow metal skylights. Owner will build.

Residence and Garage, Fanshaw street, east of Oakley street, \$4,400. Architect, private plans. Owner, B. F. Weber, 915 Gilman street, Philadelphia. Brick, 3 stories, 28x32 feet, slate roof, stone foundations, hot water heating. Garage, frame, 1 story, 18x24 feet. Contract awarded to H. H. Kieffer, Erdenheim P. O., Pa.

Residence (alts.), 6718 Quincey street, Germantown, \$1,000. Architect, Bart Tourison, 7014 Boyer street, Germantown. Owner, L. W.

Dykeman, 6840 Garston street, Germantown. New partitions and interior alterations, hardwood floors, electric lighting. Contract awarded to Eugene Tourison, 20 Westview street, Germantown.

Office, Prospect avenue, north of Summit street, Philadelphia, \$4,000. Architect, private plans. Owners, Tucker Bros., 46 Chestnut avenue, Chestnut Hill, Pa. Brick, 2 stories and basement, 19x22 feet, shingle roof, stone foundations, hot water heating, electric lighting. Contract awarded to Pringle Borthwick, 8018 Germantown avenue.

Mill (alts.), Sixty-ninth and Haverford avenue, Philadelphia, \$4,000. Architect, private plans. Owner, Estate of George Sutherland, on premises. Interior alterations. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building.

Store (int. alts.), northeast corner of Eleventh and Market streets, \$50,000. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Frank & Seder, on premises. Bulks, minor interior alterations. Contract awarded to Warren-Moore Co., Colonial Trust Building.

Office Building, Thirty-sixth and Gray's Ferry Road, Philadelphia. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Third floor addition, brick, 12x24 feet, slag roof, hardwood floors (steam heat-

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Pennsylvania Building

ing, electric lighting and plumbing reserved), roof ventilators. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Residence, 600 Rector street, Philadelphia, \$2,500. Architect, private plans. Owner, Thomas S. J. Mackleen, 602 Rector street. Stone foundations, stone and frame, 1 story, 33x41 feet, shingle roof, hot water heating. Contract awarded to John J. Hurley & Co., 4416 Cresson street, Philadelphia.

Store and Apartments, 1213-15 East Chelton avenue, Philadelphia. Architect, Le Roy B. Rothschild, Bulletin Building, Philadelphia. Owner, S. Goldfarb, 1201 East Chelton avenue, Philadelphia. Brick, 2 stories and basement, 40x60 feet, slag roof, maple floors, steam heating, electric lighting, tile work, hollow metal skylights, flush bulks, metal ceilings. Contract awarded to Davis & Clayton, 1817 North Twentieth street.

Engine Yard Work, Darby Creek Yard, Esington, Pa., \$100,000. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway, Reading Terminal, Philadelphia. Concrete engine house, 70x200 feet; machine shop, 60x25 feet; power house, 60x25 feet; 25,000 gallon capacity water tank, ash pits, coal pits, coal bin, pump house and turntable, 100 feet diameter. Contract awarded to Robert E. Lamb Co., 843 North Nineteenth street, Philadelphia.

Quartermaster's Terminal, Greenwich Point, Philadelphia, \$10,000,000. Architect, private plans. Owners, U. S. Government, Constructing Quartermaster's Department, care of Col. E. B. Morden, Chief, 504 Pennsylvania Building, Philadelphia. Brick and hollow tile, consists of warehouses, piers, docks, railroad track storage, etc., covering 45 acres. Contract awarded to Snare & Triest, Pennsylvania Building, Philadelphia.

Factory (fire repairs), Tacony and Lewis streets, Philadelphia. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Wm. & Harvey Rowland, Inc., on premises. Brick, 1 story, 100x175 feet, trussed steel roof, general restoration of building to former condition. Contract awarded to

Irwin & Leighton, 126 North Twelfth street, Philadelphia.

School (alts. and add.), 918 Locust street, Philadelphia. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owners, Locust Street Mission, on premises. Brick, 2 stories, fire tower and general interior alterations, slag roof, vapor heating. Contract awarded to R. C. Ballinger & Co., 218 North Thirteenth street, Philadelphia.

Warehouse (alts. and add.), 244 North Third street, Philadelphia, \$9,000. Architect, private plans. Owners, Cover & Co., 244 North Third street, Philadelphia. New office and interior alterations, steam heating, plumbing. Contract awarded to Geo. Kessler Cont. Co., Drexel Building, Philadelphia.

Building (alts.), 54-56-58 North Eighth street, Philadelphia, \$3,500. Architect, private plans. Owner, John H. Chesnut, 820 Perry Building, Philadelphia. Brick, new front and

new partitions. Contract awarded to Basch & Co., 1426 South Front street, Philadelphia.

Garage, Island Road and Woodland avenue, Philadelphia, \$3,000. Architects, Harris & Richards, Drexel Building, Philadelphia. Owners, Fels Co., Seventy-third and Woodland avenue, Philadelphia. Brick, 1 story, 33x63 feet, concrete foundations. Owners will build.

Machine Shop, 4825 Gardner street, Philadelphia, \$3,000. Architect, private plans. Owners, Hall Gas Engine Co., 4825 Gardner street, Philadelphia. Stone and brick, 1 story, 29x40 feet, composition roof, stone foundations. Contract awarded to E. E. Hollenback, Inc., 1804 Brandywine street.

Machine Shop, 420 Moyer street, Philadelphia, \$4,000. Architect, private plans. Owner, James L. Griffith, 420 Moyer street, Philadelphia. Brick, 1 story, 52x100 feet, slag roof, electric lighting. Contract awarded to Wm. C. Stone, 2069 East Dauphin street.

PENNSYLVANIA Construction News

Theatre (rebuilding), Eighth and Penn sts., Reading, Pa., \$70,000. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Berks Amusement Co., care of Vincent & Wilmer, Commercial Trust Building, 1450 Broadway, New York City. Brick, 2 stories. Plans about completed. (Heating reserved). Ready for bids.

Bridge, over north branch of Susquehanna River, Falls, Wyoming County, Pa. Architects, Paxson & Morgan, Wilkes-Barre, Pa. Owners, Board of Commissioners of Public Grounds and Buildings of the Commonwealth of Pennsylvania, care of George A. Shreiner, superintendent, Harrisburg, Pa. Owners are taking bids, due August 13th at 2 P. M. Plans may be obtained from superintendent, Capitol Building, Harrisburg, Pa.

Bridge, over north branch of Susquehanna River, Laveyville, Wyoming County, Pa. Architect, W. B. Paxson, Wilkes-Barre, Pa. Owners, Board of Commissioners of Public Grounds and Buildings of Commonwealth of Pennsylvania, care of superintendent, George A. Shreiner, Harrisburg. Owners taking bids, due August 13th.

Store Front (alts.), East King street, Lancaster, Pa. Architect, E. C. Urban, Lancaster, Pa. Owner, Sayers Scheid Sweeton, Lancaster, Pa. Plate glass, tile and wood work. Plans in progress.

Factory (add.), Fountain avenue, Lancaster, Pa., \$60,000. Architect, M. E. Evans, 10½ E. Orange street, Lancaster, Pa. Owners, Rowe Motor Manufacturing Co., care of Samuel J. Rowe, president, on premises. Wood, 1 story,

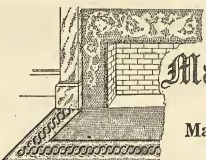
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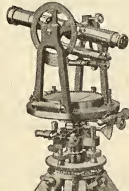
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120x200 feet, cement floors, steam heating, electric lighting. Owners will build.

Cow Barn, Creamery and Retaining Wall, etc., Spring City, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institution for Feeble Minded of Eastern Pennsylvania, Spring City, Pa. Concrete and hollow tile, 2 stories, 108x36 feet and two wings, 32x36 feet and 2 stories, 51x36 feet, asbestos shingle roof, cement, cork and brick floors, steam heating, electric lighting, concrete foundations, hollow tile, metal lath, freight elevators, roof ventilators, waterproofing and dampproofing, iron work. Lowest bid submitted by Frank H. Kaiser & Co., Pottstown, Pa., \$79,000.

Engine House and Power House, Saucon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Twelfth and Market streets, Philadelphia. Brick, reinforced concrete, terra cotta coping, 1 story, 77x36 feet, 100x200 feet; Coal Pocket, 11x34 feet; Machine Shop, 111x20 feet; Fan House, Locker House and Wash House and Toilet and Lunch Rooms, 27x36 feet,

asbestos roof, cement, asphalt, mastie paving floors, slate partitions, concrete foundations, rolled steel sash, waterproofing, roof ventilators, metal lath (6 Stalls). Owners taking bids, due August 8th. F. W. Van Loon, Denckla Building; F. A. Havens Co., 845 North Nineteenth street; Roydhouse-Arey Co., 112 North Broad street; H. E. Baton, 1713 Sansom street; F. W. Mark Cont. Co., Finance Building; Irwin & Leighton, 126 North Twelfth street, and Chas. McCaul Co., 1713 Sansom street, Philadelphia, are figuring.

Bridge, Brook Haven, Delaware County, Pa. Engineers, W. A. Courtenay, Jr., Marcus Hook, Pa., and Wm. Lowenthal, 1218 Chestnut street, Philadelphia. Reinforced concrete, 2 spans, 31½ feet and 22x30 feet wide. Plans completed. Owners will advertise for bids.

Residence (alts.), 77 La. Cross avenue, Lansdowne, Pa. Architect, private plans. Owner's name withheld. Interior alterations, electric lighting, plumbing, hardwood floors, skylights, plastering, alterations to heating system. Lam Building Co., 1001 Wood street, is figuring and is taking sub-bids, due August 1st.

PENNSYLVANIA Contracts Awarded

School, West Manchester Township, Pa., \$35,000. Architects, Gemmel & Billmeyer, Rossmiller Building, York, Pa. Owners, School Board, Manchester Township, care of Louis Weidle, 517 Pennsylvania avenue, York, Pa. Brick, 1 story, 4 rooms, slate roof, pine floors, steel beams (steam heating, electric lighting and plumbing separate bids). Contract awarded to C. Boyer & Son, York, Pa.

School, Greenland, Lancaster County, Pa. Architect, M. R. Evans, 10½ East Orange street, Lancaster, Pa. Owners, School Board, East Lampeter Township, Lancaster County, Pa. Brick, 1 story, 40x40 feet, stone foundations, slate roof, hot air heating, electric lighting, hardwood floors. Contract awarded to Wm. Echman, Badenhand, Pa.

Store (alts. and add.), West King street, Lancaster, Pa., \$5,000. Architect, M. R. Evans, 10½ East Orange street, Lancaster, Pa. Owner, John P. Krouse, 20 King street, Lancaster, Pa. Brick, interior alterations, steam heating, electric work, maple and oak floors, cement work, plate glass. Contract awarded to Wm. Plick, Lancaster, Pa.

Factory (alts. and repairs), Liberty and Shippen streets, \$10,000. Architect, M. R. Evans, 10½ East Orange street, Lancaster, Pa. Owners, Bottenfeld Co., Woolworth Building, Lancaster, Pa. Stone, 1 story, 150x60 feet, new asphalt roof, cement floors, electric lighting. Contract awarded to A. L. Wient, Lancaster, Pa.

Store (alts.), Harrisburg, Pa. Architect, E.



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C. Urban, Lancaster, Pa. Owners, J. L. L. Kuhn & W. K. Meyer, Harrisburg, Pa. Marble front and terra cotta work. Contract awarded to J. L. L. Kuhn & Co., Harrisburg, Pa.

Office Building, York, Pa. Architects, Gemmill & Billmeyer, York, Pa. Owners, York Taek and Nail Works, York, Pa. Brick, 1 story, 44x27 feet; slate roof, steam heating, electric lighting, wood floors. Contract awarded to Samuel Gladfelter, York, Pa.

Passenger Station, Kimberton, Pa. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Pickering Valley R. R., care of Philadelphia and Reading R. R., Twelfth and Market streets, Philadelphia. Stone and brick, 1 story, 37x18 feet, slate roof, yellow pine floors, concrete foundations, electric lighting. Contract awarded to W. J. Elliott, Conestoga, Pa.

Platform, Station Stairway Add., Bristol, Pa. Architect, private plans. Owners, Pennsylvania R. R. Co., New York Division, Jersey City, N. J. Frame, widening platforms, changing stairways. Contract awarded to A. L. Carhart, Penfield Building, Philadelphia.

Bridge, No. 55, Belle Meade, on the New York Branch, \$50,000. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Concrete, 85 feet long, waterproofing. Contract awarded to A. L. Carhart, Penfield Building, Philadelphia.

New Jersey Construction News

Office (alts.), 14 North Warren street, Trenton, N. J. Architect, Wm. Kleeman, Trenton, N. J. Owner, J. H. Blockwell, North Warren street, Trenton, N. J. Brick, office equipment, glass partitions. Plans in progress.

Superintendent's Cottage (alts.), Bordentown, N. J., \$7,500. Architect, F. H. Bent, Trenton, N. J., Capitol Building. Owners, State of New Jersey, care of Superintendent Valentine, Bordentown, N. J. Frame, 2 stories, 32x45 feet, shingle roof, moving and remodeling. Plans in progress.

Section Base (21 Buildings), Spec. 3210, Cape May, N. J. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Hollow tile, frame and stucco. Commanders' Residence, 2 stories, 32x39 feet; Mess Hall, 1 story, 161x54 feet, wing 57x48 feet; Gate House, 1 story, 83x25 feet; Dispensary, 145x24 feet; Scrub House, 60x25 feet; School, 167x34 feet; Barracks, 2 stories, 108x39 feet; Recreation Building, 1 story, 80x30 feet; Garage, 112x27 feet; Armory, 66x25 feet; Receiving Station, 56x25 feet, and Brig, 1 story, 51x25 feet, asbestos shingle and tin roof, steam heating, electric lighting, cement and maple floors, ventilators, cold water painting, kitchen equipment. Lowest bid submitted by Cramp & Co., Denckla Building, Philadelphia.

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HEATING

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New Jersey Contracts Awarded

School Building (Completion), Laurel Springs, N. J., \$20,000. Architect, John L. Coneys, Drexel Building, Philadelphia. Owners, Board of Education, Laurel Springs, N. J. Brick, stone trim, 2 stories, 87x50 feet (heating, ventilating, plumbing and electric work separate bids). Contract for completion of school awarded to George Bachman, Camden, N. J.

Store Building (gen. alts.), 8-10-12 E. State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, F. A. Duggan, Trenton, N. J. Brick and stucco, 2 stories, pine floors, steam heating, electric lighting. Contract for masonry awarded to J. H. Morris, Trenton, N. J. Contract awarded to James Reed, Trenton, N. J., for carpentry.

Residence (alts.), 140 West State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, F. S. Melvaine, care of architects. Brick, 3 stories, general interior alterations, hardwood floors (steam heating, electric lighting and plumbing and painting separate contracts). Contract awarded to Samuel Wiley, Trenton, N. J.

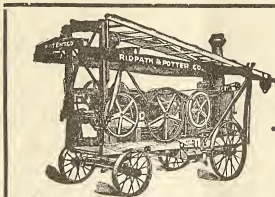
Miscellaneous Construction News

Restaurant (alts.), 713 Market street, Wilmington, Del. Architect, J. P. Thompson, Ford Building, Wilmington, Del. Owner, George Pappas, Wilmington, Del. Marble trimming, bulk windows, hot water heating, electric lightin. Architect is taking bids.

Hall (int. alts.) Second and Tustison sts., Wilmington, Del., \$14,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Board of Education, care of Mr. Guthrie, Wilmington, Del. Brick, 3 stories, 56x70 feet, mill work, plastering, tile and marble work. Owners have sublet all contracts.

Chesapeake Bay Oil Base, near Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Navy Department, Bureau of Yards and Docks, Washington, D. C. Store house on Fuel Oil Wharf, frame, 1 story, 100x21 feet, ready roof, wood floors, roof ventilators. Owners taking bids, due August 12th at 11 A. M. F. W. Mark Cont. Co., Finance Building, Philadelphia, is figuring.

Structural Shop, Spec. 3224, Mare Island, Calif. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and reinforced concrete, 2 stories, 300x696 feet, gypsum slab and asphalt roof, cement floors, hollow tile, metal lath, elevators, rolled steel sash and skylights, steel doors, plumbing, sheet metal work. Owners taking bids, due August 17th. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.



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Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwellings (6), south side of Lycoming, east of Tenth street, Philadelphia, \$17,400. Owner and contractor, 537 West Erie avenue, Philadelphia. Brick, 2 stories, 16x27 feet, slag roof, hot water heating, stone foundations.

Garage, Sixty-fourth and Greenway avenue, Philadelphia, \$2,500. George Farrell (O and C), on premises. Brick, 1 story, stone foundations, 10x150 feet, tin roof.

Garage, Main, north of Harvey street, Philadelphia, \$650. P. Holt (O), on premises. John J. Hurley Co. (C), 4416 Cresson street, Philadelphia. Brick, 1 story, 13x26 feet, slag roof, cement floors.

Garage, 856 North Eleventh street, Philadelphia, \$800. Max Silberstein (O), on premises. Elmer P. Bates (C), 1113 Parrish street, Philadelphia. Brick, 1 story, 14x24 feet, slag roof.

Moving Picture Theatre, 1018-29 Ritner st., Philadelphia, \$25,000. Morris Gerson (O and C), on premises. Brick, 1 story, 86x84 feet, fireproof roof and ceilings, steam heating, slag roof, stone foundations.

Dwelling, 600 Rector street, Philadelphia, \$2,500. Thomas S. J. Mackaleen (O), 602

Rector street, Philadelphia. John J. Hurley & Co. (C), 4416 Cresson street, Philadelphia. Stone and wood, hot water heating, 1 story, 33x41 feet, stone foundations.

Dwellings (9), 7200-29 Oakley street, Philadelphia, \$16,200. Michael Stevens (O and C), 910 Fanshaw street, Philadelphia. Brick, 2 stories, 14x25 feet, slag roof, hot air heating, stone foundations.

Manufacturing Building, Germantown and Sedgley avenues, Philadelphia, \$4,000. Air Reduction Co. (O), 120 Broadway, New York City. James Mitchell, Inc. (C), New York City. Foundations.

Dwelling, Fanshaw, east of Oakley street, Philadelphia, \$4,000. B. F. Weber (O), 915 Gilham street, Philadelphia. H. H. Kieffer (C), Erdenheim, Pa. Brick, 3 stories, 28x32 feet, slate roof, hot water heating, stone foundations.

Store and Rooming House, Island road and Botanic avenue, Philadelphia, \$13,700. John M. Kennedy, Jr. (O and C), 1001 Chestnut street, Philadelphia. Brick, 2 stories, 33x33 feet, slag roof, hot water heating, stone foundations.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store Building, northeast corner of Eleventh and Market streets, Philadelphia, \$50,000. Frank & Seder (O), Eleventh and Market sts., Philadelphia. Warren-Moore & Co. (C), Colonial Trust Building, Philadelphia. Bulks, minor interior alterations.

Machine Shop, Seventeenth and Hamilton streets, Philadelphia, \$6,000. Baldwin Loco-

motive Works (O and C), 400 North Broad street, Philadelphia. Four-story addition, 13x18 feet, brick.

Dwelling, 145 West School House Lane, Philadelphia, \$700. Walter A. Hoffman (O), 2106 Diamond street, Philadelphia. George C. Fosse (C), 5606 Utah street, Philadelphia. Brick, 1 story, porch, 12x10 feet.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

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Brass, Copper, Steel and Galvanized Wire Cloth—Wire Window
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Auto Truck Delivery to Philadelphia

Store and Dwelling, Seventh and Poplar streets, Philadelphia, \$5,000. Samuel Horowitz (O), Seventh and Poplar streets, Philadelphia. Scheetman Bros. (C), 1734 North Seventh street, Philadelphia. Brick, 3 stories, 12x13 feet, slag roof, stone foundations.

Garage, 1029 Diamond street, Philadelphia, \$450. Dr. Fox (O), 1027 Duncannon street, Philadelphia. J. Y. Loux (C), 3731 York Road, Philadelphia.

Garage, Fanshaw, east of Oakley street, Philadelphia. B. F. Webber (O), 915 Gilham street, Philadelphia. H. H. Kieffer (C), Erdenheim P. O., Pa. Frame, 1 story, 18x20 feet.

Residence, 6817 Quincy street, Philadelphia, \$1,000. L. A. Drykman (O), 6824 Garston street, Mt. Airy, Pa. Eugene Tourison (C), 20 Westview street, Philadelphia. Alterations.

Knitting Mill, 245 East Ashmead street, Philadelphia, \$400. Crossingham Knitting Mills (O), on premises. Wm. C. Wright (C), 22 Harvey street, Philadelphia. Alterations.

Dwelling, 1331 West Thompson street, Philadelphia, \$300. George F. Murray (O and C), 1331 West Thompson street, Philadelphia. Alterations.

Garage, 997-999 North Fifth street, Philadelphia, \$10,000. Michael Rock, Jr. (O and C), 826 East Allegheny avenue, Philadelphia. Brick, 1 story, 38x15 feet, 25x50 feet, slag roof, stone foundations.

Store and Dwelling, 1135 South Seventh street, Philadelphia, \$1,400. C. C. Baldi (O), Philadelphia. Wm. J. Robinson (C), 1509 Lombard street, Philadelphia. Brick, alterations.

Asylum, Forty-ninth and Market streets, Philadelphia, \$1,200. Pennsylvania Hospital for Nervous Diseases (O), Forty-fourth and Market streets. J. Morris Daniels (C), 252 South Juniper street, Philadelphia. Alterations.

Assembly Shop, 14 and 16 North Hedges street, Philadelphia, \$500. E. C. Allen (O), 6100 Washington avenue, Philadelphia. J. S. Allen (C), Pennsylvania Building, Philadelphia. Brick, 1 story, 14x27 feet, slag roof, stone foundations.

Dwelling, 3943 North Broad street, Philadelphia, \$4,000. S. Haas (O), 4523 North Carlisle street, Philadelphia. J. Roman (C), 4908 Wayne avenue, Philadelphia. Brick addition, slag roof, cement floors, 20x12 feet, 3 stories, 4x32 feet, 2 stories, 20x56 feet, 1 story.

Dwelling, 2664 Coral street, Philadelphia, \$2,000. John Harley (O), on premises. Thos. Matthews (C), 2336 North Hancock street, Philadelphia. Alterations.

Storage Tanks, Delaware avenue and Magee street, Philadelphia, \$4,000. Henry Diston & Sons Co. (O), Tacony, Philadelphia. H. E. Baton (C), 1713 Sanson street, Philadelphia. Concrete foundations.

Residence, 112 West Walnut Lane, Philadelphia, \$11,000. Charles H. Schwartz (O), Philadelphia Textile Co., Philadelphia. Wm. J. Gruhler Co. (C), 219 East High street. Three-story addition, 27x33 feet, stone foundations, single roof.

Storage Building, 1212-22 Frankford avenue, Philadelphia, \$400. P. L. Souney (O and C),

1204 Frankford avenue, Philadelphia. Brick, alterations.

Tenement House, 2216 Venango street, Philadelphia, \$500. A. P. Maloney (O and C), 2116 Venango street, Philadelphia. Alterations.

Store, 1805 East Allegheny avenue, Philadelphia, \$775. Max Sanfert (O), on premises. E. G. Reek (C), 3329 Frankford avenue, Philadelphia. Build skylights, alterations.

Office, northwest corner of Twenty-second and Washington avenue, Philadelphia, \$10,000. Belmont Iron Works (O and C), on premises. Second story addition, 50x60 feet, slag roof, brick fireproof floors.

Dwelling, Lawrence and Callowhill streets, Philadelphia, \$1,520. John R. Betz, Jr. (O), on premises. E. J. Kreitzburg (C), 1345 Arch street, Philadelphia. Brick, alterations.

Mills, Sixty-ninth and Haverford avenue, Philadelphia, \$4,000. Estate of Geo. Sutherland (O), on premises. Hughes-Foulkrod Co. (C), Commonwealth Building, Philadelphia. Interior alterations.

Apartment House, 3223 Chestnut street. M. Rosenbaum (O), 1721 Diamond street, Philadelphia. S. Jaspian (C), 226 South Second street, Philadelphia. New hot air heating system.

Dwelling, 914 Spruce street, Philadelphia, \$615. Mutual Assurance Co. (O), 220 South Fourth street, Philadelphia. James Spear Co. (C), 1825 Market street, Philadelphia. New warm air heating system.

Dwelling, 1325-27 East Montgomery avenue, Philadelphia, \$950. J. Martin (O), 1331 East Montgomery ave., Philadelphia. Philip Haibach Cont. Co. (C), Twenty-fifth and Thompson streets, Philadelphia. Hot water heating.

Manufacturing Building, 2411 West Morris street, Philadelphia, \$6,000. Standard Dental Manufacturing Co. (O), on premises. Philip Haibach Cont. Co. (C), Twenty-sixth and Thompson streets, Philadelphia. Brick, second story, 76x41 feet, slag roof.

Shed, Richmond and Beckins streets, Philadelphia, \$500. H. A. Hittner & Sons (O), on premises. H. Brocklehurst (C), 512 West Norris street, Philadelphia. Slag roof, 1 story, 20x40 feet.

Power House, Vintage and University avenues, Philadelphia, \$9,500. Philadelphia General Hospital (O), Thirty-fourth and Pine streets, Philadelphia. A. Custodis Co. (C), Pennsylvania Building, Philadelphia. Brick chimney, radial, 200 feet high.

Dwelling, Navahoe and Mermaid Lane, Philadelphia, \$600. Dr. George Woodward (O), North American Building, Philadelphia. James Spear Heating Co. (C), 1823 Market street. New warm air heating system.

Store and Dwelling, 2959 North Twenty-second street, Philadelphia, \$1,800. H. Kegen (O), on premises. Max J. Benamy (C). Brick, 1 story, 14x11 feet, stone foundations.

Boiler House, Trenton avenue and Hunting street, \$1,200. Robert Carson & Co. (O), on premises. Thomas G. Rockett & Co. (C), 2432 North Twenty-seventh street, Philadelphia. Reset boiler.

Garage, 4929 Pulaski street, Philadelphia, \$300. J. Levy (O), on premises. Don Peters

(C), 170 West Seymour street, Philadelphia. Build garage under porch, brick.

Stable, southeast corner Fourth and Wood streets, Philadelphia, \$600. Pennsylvania Co. (O), 519 Chestnut street, Philadelphia. B. Bornstein (C), 1510 North Franklin street, Philadelphia. Repairs.

Dwelling, 2207 North Thirtieth street (rear), Philadelphia, \$675. Chas. E. Pusey (O), on premises. Frank T. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. Alterations.

Stable, 1615 Unity street, Frankford, Philadelphia, \$1,300. H. A. Engle (O), on premises. Ambrose Philips (C), Frankford, Philadelphia. Repair fire damages.

Dwelling, southwest corner of Sixty-eighth avenue and Thirteenth street, Philadelphia, \$2,000. David Atlass (O), on premises. Wm. R. Dougherty (C), 1610 Sanson street, Philadelphia. Alterations, stone.

Dwelling, 1709 Spruce street, \$2,800. Dr. W. R. Wilson (O), on premises. H. L. Roberts (C), 228 North Sixteenth street, Philadelphia. Hot water heating system.

Boiler and Engine House, Lehigh avenue and Eighteenth street, Philadelphia, \$9,000. C. H. Wheeler Manufacturing Co. (O), on premises. John N. Gill & Co. (C), Otis Building, Philadelphia. Brick, one-story addition, cement floors, 41x51 feet, stone foundations.

Carpenter Shop, 3926 Mt. Vernon street, Philadelphia, \$2,200. Owen Fogarty (O and C), 1915 Cherry street, Philadelphia. Brick, 16x60 feet, 2 stories, slag roof, cement floors.

Shed, Fifty-fourth and Columbia avenue, Philadelphia, \$465. Munyon's Home Remedy Co. (O), on premises. W. D. Corrison (C), 1515 North Fifty-fifth street, Philadelphia. Shed, 30x27 feet.

Store and Dwelling, 1113 North Fortieth street, Philadelphia, \$350. Joseph Rosenberg (O), on premises. Samuel Kohn (C), 4008 Poplar street, Philadelphia. Alterations.

Store and Dwelling, 239 Callowhill street, Philadelphia, \$1,330. Continental Title and Trust Co. (O), Philadelphia. E. K. Kreitzburg (C), 1345 Arch street, Philadelphia. Brick, alterations.

Stores, 1513-15 Vine street, Philadelphia, \$1,800. M. Danaenbaum (O), on premises. George M. Thayer & Co. (C), 1233 Ludlow street. Interior alterations.

Restaurant, 43 North Eleventh street, Philadelphia, \$900. B. Alessandro (O), on premises. Warren Bros. (C), 1113 Cherry street, Philadelphia. Brick, tile floor, 36 feet long.

Garage, Sixty-fourth avenue, east of Sixth street, Oak Lane, Philadelphia, \$3,600. Henry Freund (O), on premises. Clinton Hemmerly (C), Oak Lane Post Office, Philadelphia. Two stories, brick, 19x20 feet, stone foundations, shingle roof.

Building, Juniper and Appletree streets, Philadelphia, \$350. J. Walter Rosenberg (O), 151 South Broad street. Albert Zellfelder (C), 151 South Broad street, Philadelphia. Alterations.

Warehouse, Eleventh and Vine streets, Philadelphia, \$11,110. James A. Humphreys (O), 1021 Callowhill street, Philadelphia. Cosa & Shrogia (C), 922 South Twelfth street, Phila-

We have pebbles all sizes. Cost less than what you are using. DAVID
FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

delphia. Brick, 1 story, stone foundations, slag roof.

Dwelling, 2118 South Seventh street, Philadelphia, \$400. Simon Mogus (O and C), on premises. Alterations.

Garage, 510 Chew street (rear), Philadelphia, \$500. A. W. Schotter, on premises. J. M. Faust (C), 4611 North Broad street, Philadelphia. Brick, 1 story, 11x16 feet, stone foundations.

Dwelling, Fifty-first and Osage avenue, Philadelphia, \$2,000. A. M. Repeti (O), Reading Terminal, Twelfth and Market streets, Philadelphia. George M. Evans (C), 45 North Thirteenth street, Philadelphia. Brick, 1 story, 16x21 feet, stone foundations.

Rooming House, 1032 Spruce street, Philadelphia. Edgar Cross (O), Stock Exchange Building, Philadelphia. J. E. Minery (C), 273 South Fourth street, Philadelphia. Alterations, fireproofing.

Residence, 127 East Mermaid Lane, Philadelphia, \$475. J. O'Neill (O), on premises. Ludwig Alt (C), 1232 West Sartin street, Philadelphia. Repair fire damages.

Office and Stores, Fifty-ninth and Whitley avenues, Philadelphia, \$1,000. C. H. Looper (O and C), on premises. Repair fire damages.

Manufacturing Building, 909 Fairmount avenue, Philadelphia, \$400. Fred Pye (O), on premises. A. R. Raff Const. Co. (C), 1635 W. Thompson street, Philadelphia. Repair fire damages.

Cigar and Pool Rooms, 508 Arch street, Philadelphia, \$400. Louis Bergdoll Co. (O). Twenty-ninth and Parrish streets, Philadelphia. A. R. Raff Const. Co. (C), 1635 West Thompson street, Philadelphia. Repair fire damages.

Store and Dwelling, Coral and Wheatstheaf Lane, Philadelphia, \$500. R. H. Forreder, Inc. (O), on premises. George Kessler Const. Co. (C), Drexel Building, Philadelphia. New brick front.

Store, Clementine and Livingston streets, Philadelphia, \$800. H. Spokes (O), 3137 Livingston street, Philadelphia. Frank Boffa (C), 3136 Fulton street, Philadelphia. Two-story addition, brick, 16x12 feet, slag roof.

Apartments, 1826 West Tioga street, Philadelphia, \$4,000. Dr. B. L. Brown (O), on premises. S. D. Milner (C), 1112 Foulkrod street, Philadelphia. Two-story addition, 18x11 feet, brick.

Manufacturing Building, Bermuda and Wakeling streets, Philadelphia, \$8,000. Barrett Manufacturing Co. (O and C), Margaret and Bermuda streets, Philadelphia. Radial brick stack, 200 feet high.

Store and Dwelling, 1737 Lombard street, Philadelphia, \$60. M. Stern (O), on premises. Jake Bender (C), 1817 South Fourth street, Philadelphia. Brick, 1 story, 12-17 feet, stone foundations, slag roof.

Dwelling, 6101 Washington avenue, Philadelphia, \$700. E. C. Allen (O), on premises. M. Marino (C), 6200 Vine street, Philadelphia. Brick, 2 stories, 15x16 feet.

LACK OF ARCHITECTURAL CRITICISM.

(From the "Southern Architect.")

An old saying says that where there is no opposition there is no interest nor or coin. And in the United States the total absence of constructive architectural public criticism is exceeded only by the lack of public interest in architecture.

The editor firmly is of the opinion that the latter condition is strictly an outgrowth of

the former. There has never been in American architectural history, any vital consistent, constructive public criticism of architectural productions, either in the large or in details. Criticism, such as it is, is restricted entirely to the architectural schools.

The net result has been to make architecture one of the "weak sisters" of the arts; implying, as the lack of criticism does, the inability of architecture to withstand public criticism.

All the other arts—drama, painting, sculpture, literature, music—have their vital and pointed critics; works produced by followers of any of these arts cannot go unscathed for long if of poor quality or seriously erring. And where praise is to be bestowed it is bestowed liberally and public recognition is given by acclaim.

Do we have happenings of this kind in architecture? Yes—semi-occasionally, as in the case of the Woolworth building, which captured the imagination of Americans by the thing which most captivates Americans—size, bulk, biggest!

But of constructive, educative criticism, aimed at architect and owner equally, we find none; and in architectural journals, where one would expect to find at least a page or so devoted to criticism directed in a technical sense for the benefit of architects, we find nothing resembling it. Such criticism as we find is most of the sort that might be classed as "appreciations." The "Architectural Review" of Boston has the nearest thing to real criticism, but which falls completely short of the kind that is here bespoken for, in its monthly critique of architectural magazines, commenting on the articles and pictures in each magazine, often interspersed with some brief criticisms of a suggestive value.

Why this absence of criticism?

The editor has often wondered whether the art was considered so very difficult that none of its products could approximate perfection; that the practical conditions under which works of architecture are produced are so involved, that all criticism would be unfair and hence is avoided by would-be critics, except in the schools where criticisms might be said to be sub-rosa.

But, granting the great difficulties involved in the practice of architecture, in modern times—in all times for that matter—this is not a sufficient reason, if it be a reason advanced by any one, for avoiding criticising architectural works, by professionally competent critics.

Criticism of the architecture of dead-and-gone times is common enough, but as to words of criticism on modern phases, or modern problems, there is little or none. One would look, at least, for something of the kind in the books on architecture, where, one might say, an author would have freer scope and less fear of "hurting somebody's feelings;" but

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-EDITOR, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Our specialty is Portland Cement that will stick and pass the City Department. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

even in the books, where they touch upon modern architecture they do so very lightly, give very few pages to the subject, and no criticism beyond bare comment on tendencies. This may be found to be the case in practically any book on architecture which one may pick up—Heathcote Statham's being a possible exception—and so the quest for real, vital, constructive modern architectural criticism comes to an end. Its very paucity forces the question, Why so little?

A THINKING SPELL FOR ARCHITECTS.

When the great adjustment of architectural and building affairs is accomplished and business assumes its normal activity, we will begin to realize and appreciate the benefits of the recent lull. The new era will be marked by higher standards and improved methods applied to manufacture and the execution of architects' designs. Likewise, there will be noticeable a larger consumption of materials drawn from our own natural resources which are destined to replace, permanently, raw materials that have hitherto been imported from European countries.

Our manufactured products for building purposes will be in reality American goods and we have faith to believe that they can and will be made as good and reliable as any foreign importations.

When the wheels of progress show a tendency to turn backward, thinking men direct their attention and energies towards the improvement of business systems and it oft-times happens that the interposition of Providence actually provides these thinking spells for our ultimate good. An architect expressed the thought in this way: "Architectural and building afflictions are about the same as the physical ills that afflict the human body. A man goes on under high tension, disregarding little pains and aches, forcing the human machine to the breaking point, until Nature rebels and nothing short of complete rest and careful treatment will make the body respond. In other words, he takes an enforced vacation and comes back in better condition of brain and body and capable of better effort.

But along comes the upheaval of the old systems; men have sprung up with real ideas, ordinary people are pondering over the difference between faking and creating, and extraordinary people are endeavoring to satisfy the demand for architecture which shall speak for what the word really means, "The art of building."—"Architecture."

The man who doesn't advertise because he can't afford to "do it right" will never reach a position of affluence because everything worth while in the world had to have a beginning, and there can be no "get there" for the fellow who fails to make a start.

SOME DATA ABOUT THE LARGEST REINFORCED CONCRETE BUILDING.

A reinforced concrete building of more than a million square feet floor area has been completed in St. Louis for the Anheuser-Busch Company. It has one 26-foot story below ground and six stories above ground. The following figures give some idea of the magnitude of this structure:

Ground area, square feet.....	117,900
Floor area, square feet.....	1,117,700
Cubic contents, cubic feet.....	21,932,000
Concrete, cubic yards.....	81,040
Cement, barrels.....	121,560
Reinforcing steel, tons.....	6,780
Enameled face brick.....	2,000,000
Other brick.....	7,000,000
Lumber in forms, ft. b. m.....	5,951,000

GOOD ADVICE.

In times of war prepare for peace. Overhaul your plant, Mr. Architect, in dull times; just as manufacturers and merchants do. Perfect your organization, devise systems for your work; draw up statistics and compile data; cut out the dead wood—make ready!—"The Architectural Forum."

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

There's one variety of advertiser who gets our Angora. This is the chap who can't afford a large space and doesn't advertise, as a regular thing, because a small space "isn't seen." Some of the biggest advertisers we have started out with small space. Ask them whether the small space is seen. If advertisers had to wait until their businesses developed to full page stature before advertising, there'd be mighty few advertisers. The big man becomes big by growth. And growth starts with the seed.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently, "but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectually than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

Why not try it out?

The cost is not excessive.

Call Mr. L. S. DeLone.

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1918

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126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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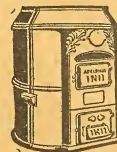
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Vol. XXXIII., No. 32
August 7, 1918

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CONTRACTORS AND THE MATERIAL AND EQUIPMENT TRADES

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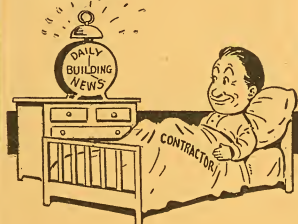


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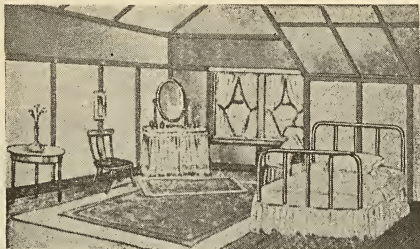
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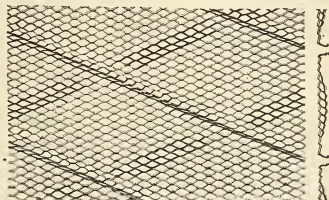
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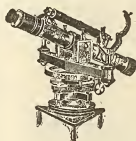
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BUILDERS' GUIDE

VOLUME XXXIII
Number 32

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

PHILADELPHIA
August 7, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 324-325-326)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

PUBLISHED BY

Building News Publishing Company, Inc.
PERRY BUILDING, PHILADELPHIA
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Second Class Matter



As The Editor Sees It



THE average individual is confronted today by no more difficult task than that of becoming used to the high cost of materials and labor. High prices are the rule in all business and building materials are no exception.

It is easier, however, to become accustomed to the high cost of food and clothes, which must be bought every day, than to the price of materials for the new house which has been contemplated. It is quite usual to exclaim then—"Oh! I'll wait until prices drop." There, however, comes the rub. When will prices drop?

Anyone who is putting off necessary construction of any character, on the supposition that prices of labor and material will drop at the close of the war is in a fair way to be disappointed.

As soon as the war is over, an enormous amount of building work, the plans for which are now in architect's offices, will be gotten under way, and many other projects which have been deferred on account of the war, will be put into execution.

In addition to furnishing material for work in our own country, America will be the chief source of supply of materials for the reconstruction work in France, Belgium and other devastated countries.

There are many contributory causes to the prevailing prices of material and labor, and since we can hope for no change in the near future, it seems wise to adjust ourselves to the new order of things.

The Record and Guide of New York has made a report on the price of Portland cement, availability of supply et cetera. The conditions existing in this industry are indicative of those in most of the other structural materials. The report says:

It has been reported in the newspapers that the Government has issued priority certificates for Portland cement. The fact is, however, the authorities have agreed to give cement manufacturers a degree of preferential treatment, in order to assure a reasonably full supply. This was made conditional upon the manufacturers curtailing their productions sufficiently to meet the demands of war requirements and other needs of national or exceptional importance. This plan, it is estimated in Washington, means a curtailing of the normal output by about thirty per cent.

Investigation into the conditions surrounding the production of Portland cement in the Lehigh Valley indicates that although the war has created an abnormal situation in many respects, the cement industry is operating upon a sound basis, producing and shipping material to the maximum permitted by the Fuel Administration, making every effort to conserve the resources of the industry, serve its customers to the best of its ability, and patriotically "do its bit" for the Government in its hour of need.

The producing capacity of the Lehigh Valley Portland cement manufacturing

district is approximately 30,000,000 barrels annually, but during the past three or four years the average annual output has been in the neighborhood of 23,000,000 barrels a year. This amount is approximately 36 per cent. of the entire cement production of the country.

Early this year the National Fuel Administration decided that for 1918 the cement industry should be furnished with coal sufficient to manufacture 75 per cent. of the average output for the past three years. Owing to the difficulty in obtaining fuel during the first three or four months of this year, which prevented the operation of the majority of the cement plants in the Valley during that time, it is doubtful, even if the mills operate to their full capacity for the balance of the year, whether they will be able to produce 75 per cent. of their output of previous years. There has been considerable curtailment in production this season, but manufacturers are not willing to give out definite figures at this time.

Notwithstanding the lack of construction of a private nature it is extremely doubtful if there has been a time in the history of the Portland cement industry when manufacturers have had a smaller stock of the finished product in reserve. Almost all of the storage bins in the Lehigh district are cleaned out nightly and the finished product loaded upon cars for shipment. Many of the makers are shipping their entire daily output as it is made, and as the demand is steady there

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is little likelihood of any great reserve being piled up at mill points.

At present there is a negligible amount of Portland cement being exported to foreign ports, practically the entire mill output is going to supply the jobbers or into war construction and the other types of building requirements in the United States. The railroads of the nation formerly were prominent among the cement users, but these interests are now taking a small quantity as they are only making road repairs of the most essential character.

Manufacturers are agreed that there is, and will be, a sufficient supply of cement for all building purposes and that there cannot be a famine in this important material line. Cement, tributary to the New York market, is readily available and in volume sufficient to take care of any ordinary demand, unless the Government materially increases its present requirements. An official of one of the prominent producing companies in the Lehigh district stated that during the past month about 23 per cent. of the shipments from their mills were forwarded direct to Federal building projects. As all orders for materials to be used in Government work are pro rated among the manufacturers according to the capacity of their respective plants, this figure can be taken as indicating the amount of Portland cement the Government is now taking out of the market.

It is believed that Federal requisitions of cement are likely to become much larger than at present and that the demands upon the industry will grow in volume as the war progresses and the Governmental program of construction is expanded to its maximum. Producers will not be surprised if the Government announces that it will require the entire output of the cement mills for a limited period, possibly for three or four months. The Portland Cement Association pledged 100 per cent. of their output, if necessary, at any time the Government should have need of it.

Cement manufacturers are paying higher wages today for common labor employed in their plants than ever before, yet they are experiencing great difficulties in holding their forces together. Producers are paying at the rate of 32c. to 35c. per hour for a ten-hour day, with time and one-half for overtime, and double time for Sundays and holidays, which is about 100 per cent. above the scale in force prior to the war. Yet they lose men to other plants in the district who offer wages considerably higher than the scale paid in the cement mills. The Bethlehem Steel Company, located in the heart of the cement producing district,

and other foundry and manufacturing corporations have immense war contracts, are steadily draining the cement industry of its man power by offering work at the rate of 44c. and 45c. per hour for common labor. These concerns have been offering as high as \$8.50 per day for skilled mechanics, carpenters, masons, plumbers and other trades.

Military enlistments and the selective draft have also added to the labor difficulties of the cement manufacturing industry. A large percentage of the men employed in these plants were of military or draft age, and the number of draftees added to the high percentage of voluntary enlistments from this district has resulted in intensifying the labor shortage.

At present, and for some time past, there has been practically no difficulty in obtaining all the coal required to operate cement plants in the Lehigh Valley. Fuel shipments are now coming through in excellent volume and reasonable time and without the assistance of Federal priority orders. Some of the manufacturers using a slag anthracite are even able to store up considerable tonnage against the time when freight, transportation and mining problems might again interfere with their obtaining the required supply. Users of high gas bituminous coal are unable to store supplies in any great quantity, owing to the inflammability of high gas coal, which is a constant menace to the plant. These producers depend upon a steady supply of fuel from the mines.

The mounting cost of fuel has been one of the principal reasons for the steady advance in price of Portland cement. Before the war, slag anthracite was selling at the mine mouth for 75c. a ton and plus the freight and handling brought the delivered cost up to about \$2.50 a ton. At present the same quality of coal is costing, delivered, in the neighborhood of \$6.00 a ton and this price is likely to increase. As it requires about 160 pounds of coal to produce a barrel of Portland cement it can be readily seen how this increase has effected cement prices.

Packing costs have also been prominent among the influences that have advanced the cost of cement to the consumer. Prior to 1914 the cost of bags made from seven-ounce cotton duck, generally used in cement bags, was 8c. or 8½c. each per bag. Now bags made of the same quality of material cost about 30c. each. The rebate that manufacturers allow for returned bags is 10c. each.

Paper bags of a quality strong enough to stand the strain required before the war cost about 2½c. each. At the present time producers pay \$60 a thousand or 6c. each for bags so poor in quality

as to make the safe arrival of cement at its destination problematical.

According to the present outlook producers of Portland cement predict that the price of their commodity will not recede from its present high level for a long time to come. Production, packing and shipping expenses are steadily mounting, as are wages, and the producers expect to pass these additional costs along to the jobbers and the ultimate consumers.

* * *

ACCORDING to the Ohio Architect, Engineer and Builder

"The war-after-the-war is already with us. The European nations, in all their tribulations, have never lost sight of the necessity of preparing for after-the-war conditions. England and France are preparing, and it behooves Americans, privately as well as publicly, to do their bit for the future.

Germany is gloating over what it is pleased to term "a disastrous decrease in American advertising." Here is an editorial translation from Berlin "Tageblatt":

"If the despised Yankee nation think they are going to win the war and force Germans out of foreign markets there is nothing to indicate this sentiment in their local and foreign advertising. Many of their advertising agencies have closed their doors through lack of patronage. Their much-talked-of captains of industry have canceled advertising contracts everywhere.

"Germany and German merchants have increased their advertising space in neutral markets and at home. It pays to advertise in war as well as in peace. The far-seeing merchant never stops advertising."—BERLIN "TAGERLATT."

Beating the Kaiser would be sufficient reason for advertising during the war, but that is not the only purpose which advertising now will serve. The far-sighted business man is the one who keeps his product and firm before the public now and he is the man who will share in the enormous business of the reconstruction period after the war.

Repetition tends to create habit, the more often we see, do or hear a thing, the quicker we are likely to be influenced by it. The consecutive appeal of a number of advertisements will develop certain memories and associations tending to overcome the natural habit of procrastination.—Making advertising pay.

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Temporary Timber Storehouse, Spec. 3242, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood, frame, corrugated steel siding, 1 story, 600x180 feet, 800x105 feet, ready roof, concrete floors, concrete foundations, concrete roadways, electric lighting, fire doors. Owners taking bids, due August 12th at 11 A. M. W. W. Anstine & Co., 1218 Filbert street; Edw. Fay & Son, 2 South Mole street; J. S. Rogers Co., Drexel Building; Lam Building Co., 1001 Wood street; Geo. F. Pawling Co., 1432 South Penn Square, are figuring.

Storage Shed, foot of Morris street, Delaware River, Philadelphia. Architect, George I. Lovatt, 416 Walnut street, Philadelphia. Owners, Baugh & Sons Co., 20 South Delaware avenue, Philadelphia. Frame, 1 story, 100x300 feet, concrete foundations, concrete floors, electric wiring, electric tramway. Architect taking bids, due August 10th. Pomeroy Const. Co., 1609 Ranstead street; Doyle & Co., 1519 Sansom street; Wm. R. Dougherty, 1610 Sansom street, all of Philadelphia, and C. T. Stockhausen, Baltimore, Md., are figuring.

Store and Apartment Building, West Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone and terra cotta, 3 stories, 100x92 feet, will contain 22 apartments of 3 and 4 rooms, 4 large stores, slag roof, hardwood floors, combination lighting, tile and marble work, metal ceilings, ventilators, heating undecided. Preliminary plans completed. Owner will be ready for sub-bids in about two weeks.

Residences (9 pairs), Twenty-first and Chew streets, Philadelphia. Architect, H. Rex Staehlehouse, 129 South Fifth street, Philadelphia. Owner, J. M. Chanton, care of architect. Brick and stucco, 2½ stories, 16x36 feet, slate roof, hardwood floors, stone foundations, hot water heating, electric lighting, tile and marble work. W. O. Springer, 1624 Latimer street, and Rush Bros., 1100 Fillmore street, are taking sub-bids.

General Storehouse, Spec. 3231, Navy Yard, Philadelphia, \$800,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, reinforced concrete, brick, hollow tile, 8 stories, 183x363 feet, wood or concrete piles, composition, asphalt or asphalt roof, concrete floors, compressed asphalt blocks, steam heating, electric wiring, steel sash, sheet metal skylights, fire doors, kalamein doors, safety treads, roof ventilators, 10 electric freight elevators, two passenger elevators, two spiral chutes. Owners taking bids, due August 12th at 11 A. M. The following are figuring: Cramp & Co., Denckla Building; Warren-Moore Co., Colonial Trust Building; F. W. Mark Const. Co., Finance Building; Turner Concrete Steel Co., 1713 Sansom street; Thomas Reilly, 1616 Thompson st.;

Melody & Keating, 1322 Race street; J. S. Rogers Co., Drexel Building; Wm. R. Dougherty, 1610 Sansom street; M. H. McCloskey, Jr., 1620 Thompson street; W. W. Anstine Co., 1218 Filbert street, and George F. Pawling Co., 1410 South Penn Square, are figuring.

Garage, 748 South Swanson street, Philadelphia. Architect, Charles E. Oelschlagel, 1615 Walnut street, Philadelphia. Owner, James Gallagher, Inc., 810 South Swanson street, Philadelphia. Brick, 1 story, 33x160 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, hollow metal skylights (gasoline storage system reserved). Architect taking bids, due August 7th. F. A. Havens & Co., 845 North Nineteenth street; Lam Building Co., 1001 Wood street, and E. J. Kreitzburg, 1345 Arch street, are figuring.

Store and Apartment Building, North Broad street, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone, terra cotta trim, 2 stories, 60x17 feet, slag roof, hardwood floors, stone foundations, hot water heat, combination lighting, tile and marble work, metal ceilings, metal bulks. Plans in progress.

Residences (16), Northeast Boulevard, Philadelphia, from \$10,000 to \$12,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, stone and stucco, 3 stories (11 rooms), 16½x82 feet, slag, slate, tile and tin roof, hardwood floors, cement work, stone foundations, hot water heating, combination lighting, marble work. Plans about completed. Owner will take sub-bids about August 7th.

Garage, West Philadelphia, \$25,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick and stone, 2 stories, 60x100 feet, slag roof, stone foundations, steam heating, combination lighting, cement floors (gasoline storage system reserved). Plans about completed. Architect will take bids in one week.

Garage, 6828 Anderson avenue, Philadelphia. Architect, Amos W. Barnes, Hermit and Righter streets, Roxboro, Pa. Owner, Richard W. Wallace, 120 Chestnut street, Philadelphia. Stone, 1 story, 33x38 feet, slate roof, cement floors, electric lighting. Architect has received bids.

Residence, Fox Chase, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Stone, brick, frame and plaster, 3 stories, 16x34 feet, single or slate roof, hot water heating, combination lighting, pine floors. Plans about completed. Owner will take sub-bids in one week.

Store Building (alts.), 1019-21 Market st., Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Samuel Sternberger, Tenth and Filbert street, Philadelphia. Brick and mill construction, 5 stories, carpentry and mill work, plastering, slag roof, hardwood floors, painting, glazing, iron work (cedar or cypress tank, 10,000 gallon

capacity, and necessary foundations reserved). Architect taking bids, due August 8th. Lam Building Co., 1001 Wood street; Smith-Hardican Co., 1606 Cherry street; Stacy Reeves & Sons, 2011 Market street; and Wm. R. Dougherty, 1610 Sansom street; F. B. Davis, 240 North Sixteenth street, are figuring.

Store Building (alts.), 1816 Market street, Philadelphia. Architects, Henon & Boyle, 10 South Eighteenth street, Philadelphia. Owner, Estate of D. Fuller, 10 South Eighteenth street, Philadelphia. General interior alterations, iron work, carpentry, cement and concrete work, mill work, hardware, steam heating, electrical wiring, painting, plumbing. Architects have received bids.

Business College (alts. and add.), Twelfth and Walnut streets, Philadelphia, \$30,000. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Banks Business College, 925 Chestnut street, Philadelphia. General interior changes, new fire tower, new elevator, new partitions, etc. Plans completed. Architects ready for bids.

Residences (500), Oregon avenue, Seventh to Thirteenth street, Philadelphia. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Government, care of Bureau of Industrial Housing and Transportation, Washington, D. C. Various sizes and materials. Plans about completed. Owners will take bids in about one week.

Extension to Dry Kiln, Wood Storage Building and Transfer Table, Spec. 3235, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, reinforced concrete, 1 story, 65x55 feet, concrete foundations, brick and terra cotta, 1 story, 50x63 feet, composition roof, steam heating, electric lighting, rolled steel sash, tin covered doors, concrete floors, hollow tile, dampproofing. Owners taking bids, due August 12th at 11 A. M. Edw. Fay & Sons, 2 South Mole street; Thos. C. Trafford, 1213 Sansom street; W. W. Anstine & Co., 1218 Filbert street; Monaghan & Losse, 3016 Chestnut street; H. H. Welmeyer, 509 West Cumberland street; Lam Building Co., 1001 Wood street; F. B. Davis, 240 N. Sixteenth street; Thos. Reilly, 1616 Thompson street, are figuring.

Warehouse, 531-37 North Fourth street and 528-32 North Orianna street, Philadelphia. Architect, Carl B. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care of architect. Brick, slow burning construction, 1 story and basement, 60x178 feet, slag roof, pine floors, electric lighting. Architect taking bids, due August 12th. Conneen Const. Co., 1737 Filbert street; F. B. Davis, 240 N. Sixteenth street; Jos. Levin Co., 1530 South Sixth street; E. J. Kreitzburg, 1345 Arch street; A. L. Fretz & Son, Heed Building; Ketcham & McQuade,

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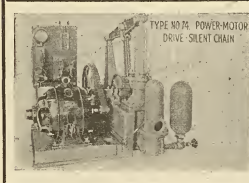
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1029 Brown street, and D. A. McClelland, 4011 Baring street, Philadelphia, are figuring. Lumber Shed, Broad and Washington avenue, Philadelphia, Spec. 3013. Architect, private plans.* Owners, U. S. Marine Corps, Q. M. Department, 1100 South Broad street, Philadelphia. Plans in progress. Owners will advertise for bids.

1029 Brown street, and D. A. McClelland, 4011 Baring street, Philadelphia, are figuring. Lumber Shed, Broad and Washington avenue, Philadelphia, Spec. 3013. Architect, private plans.* Owners, U. S. Marine Corps, Q. M. Department, 1100 South Broad street, Philadelphia. Plans in progress. Owners will advertise for bids.

Arsenal. Brick, reinforced concrete and terra cotta, 3 stories, 210x61 feet, 2 stories, 107x36 feet, and 1 story, 147x35 feet, slag and slate roof, cement floors, hollow tile, metal lath, elevators, safety treads, roof ventilators, waterproofing, wire work. Contract awarded to F. W. Mark Cont. Co., Finance Building, Philadelphia.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Metal Pickling Plant (add.), Hunting Park and Wissahickon avenues, Philadelphia, \$30,000. Architect, private plans. Owners, E. G. Budd Manufacturing Co., on premises. Brick and concrete, 1 story, 69x146 feet and 17x26 feet, slag roof, cement floors, concrete foundations, rolled steel sash, metal lath. Contract awarded to Barclay White & Co., 1713 Sanson street, Philadelphia.

Hospital, Seventh and Delancey street, Philadelphia, \$200,000. Architects, Duhring, Okie & Ziegler, 1218 Chestnut street, Philadelphia. Owners, Babies' Hospital of Philadelphia, care of Mr. Davidson, 1713 Walnut street. Fireproof, brick and granite, steel and reinforced concrete, 6 stories and basement, 40x51 feet, slate and cement roof, stone foundations, steam heating, electric lighting, tile and marble work, rolled steel sash, fireproof doors, cement and composition floors, metal lath, elevators, metal window guards, waterproofing (heating, plumbing, sterilizers, refrigerators, incinerators, ranges, kitchen cabinets, electric wiring and electric elevator reserved). Contract awarded to Robert E. Lamb Co., 343 N. Nineteenth street, Philadelphia.

Apartment House, Forty-fourth and Walnut streets, Philadelphia, \$13,000. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owner, Pasquale C. Teti, Tenth and Catherine streets. Brick, concrete and steel, 3 stories, 12 apartments, slag roof, hot water heat, electric light, tile and marble work, hardwood

floors. Contract awarded to Whiteall Const. Co., Tenth and Catherine streets.

Nurses' Home, Ridge and Jamestown avenues, Roxboro, Philadelphia, \$45,000. Architects, Zantzing, Borie & Medary, Otis Hospital, Philadelphia. Owners, St. Timothy's Hospital, on premises. Brick and steel, 2 stories, 37x56 feet, slag roof, steam heat, electric lighting, tile work, reinforced concrete floors, metal lath, roof ventilators. Contract awarded to A. E. Culbertson, 334 Roxboro avenue, and Wm. H. Eddleman & Son, 453 Green Lane, Roxboro, Pa.

Grading and Laying Tracks, Belmont Branch, between Girard and Montgomery avenues, Philadelphia. Architect, private plans. Owners, Philadelphia, Terminal Division, Pennsylvania R. R. Co., C. E. Shand, Broad Street Station, Philadelphia. Grading and laying tracks. Contract awarded to Keystone State Const. Co., Franklin Bank Building, Philadelphia.

Store Building (alts.), 214-16 Arch street, \$55,000. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Ernest Schwehm, care of architect. Consists of interior alterations. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

General Storehouse, Small Arms Ammunition Store House, Cart House, Removal and Reconstruction of present Carriage and Store House, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford

Special Ammunition Store House and Metal Store House, No. 2, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Ordnance Department, Frankford Arsenal, Philadelphia. Brick, reinforced concrete, 1 story, 220x48 feet and 483x67 feet, slag roof, cement floors, concrete foundations, hollow tile, metal lath, rolled steel sash, steel, fire and kalamoin doors, safety treads, roof ventilators, waterproofing. Contract awarded to F. W. Mark Cont. Co., Finance Building, Philadelphia.

Machine Shop (add.), northwest corner of Twenty-third and Vine streets, Philadelphia, \$12,377. Architect, private plans. Owners, Newton Machine Tool Works, on premises. Brick, elevator shafts, (2) 7x9 feet and (1) 7x8 feet. Contract awarded to Matthew Schmidt, 1308 North Sixth street, Philadelphia.

Factory Buildings (2), Beach and Palmer streets, Philadelphia, \$200,000. Architect, private plans. Owners, Wm. Cramp & Sons, on premises. Steel, 1 story, 50x225 feet and 100x285 feet, slag roof, steel sash. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

Storage Building (alts. and add.), Cornwall and Jasper streets, Philadelphia, \$3,000. Architect, private plans. Owners, Westmoreland Lye Works, on premises. Brick, 2 stories, 25x25 feet, slag roof. Contract awarded to Stewart Bros., 2546 North Orkney street, Philadelphia.

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Forty years ago when the now huge plant of the Harmony Mills was built at Cohoes, N. Y., the roof was laid along the lines now advocated in The Barrett Specification.

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"***the original roofs laid along the lines of The Barrett Specification were applied on our mills about forty years ago, and have served us satisfactorily during this period.

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"Therefore, we decided to reroof our mills with Barrett Specification. The reroofing work is, of course, well on the way to completion and we are pleased to advise that we consider your supervision over the application of great value. We shall be glad to receive expression of your confidence in the roofing in the shape of your Twenty-Year Bond.

(Signed) "John A. Perkins, Agent."

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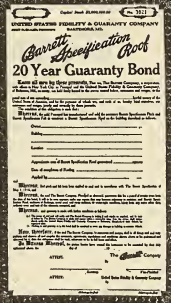
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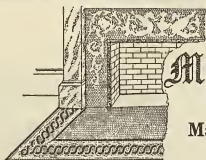
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Walleworth, Penn. Club, Wilmington, Del.
Brick, 3 stories, stone foundations, electric
lighting. Plans in progress.

Chicken House and Piggery, Villanova, Pa.
Architect, Horace Trumbauer, Land Title
Building, Philadelphia. Owner, Morris Cloth-
ier, Villanova, Pa. Frame, 1 story, 20x200
feet, shingle roof, concrete floors. Architect
has received bids.

Engine House, Rutherford, Pa. Engineer,
Samuel T. Wagner, Reading Terminal, Phila-
delphia. Owners, Philadelphia and Reading
Railway Co., Reading Terminal, Philadelphia.
Brick, steel, reinforced concrete, terra cotta
coping, 1 story, 132x114 feet, concrete founda-
tions, asbestos roof, concrete floors, metal
lath, rolled steel sash, ventilating, concrete
pit, 150x4 feet. Owners taking bids, due Aug-
ust 19th. The following are figuring: F. W.
Van Loon, Denckla Building; Roydhouse-Arey
Co., Fidelity Building; A. L. Carhart, Pen-
field Building; F. A. Havens & Co., 845 North
Nineteenth street; F. W. Mark Cont. Co.,
Finance Building; H. E. Batton, 1713 Sansom
street; Warren-Moore & Co., Colonial Trust
Building, Philadelphia, are figuring.

School (alts. and add.), Willow Grove, Pa.
Architects, Heacock & Hokanson, Bailey
Building, Philadelphia. Owners, Abington
Township School Board, Abington, Pa. Stone,
2nd story addition, 46x33 feet, slag roof, steam
heating, electric lighting, stairways, pine
floors. Owners taking bids, due August 16th.

Apple Storage House, Orland, Pa. Archi-
tects, Stewardson & Page, 316 Walnut street,
Philadelphia. Owner, A. C. Harrison, Drexel
Building, Philadelphia. Stone, 2 stories, 80x
33 feet, asbestos shingle roof, stone founda-
tions, reinforced concrete floor. Architects
taking bids, due August 7th. Frank E. Wal-
lace, 1220 Chancellor street; Specht & Sperry,
Heed Building, Philadelphia, and W. John
Stevens, Inc., Wyncote, Pa., are figuring.

Residences (1,139), Bethlehem, Pa. (Pembroke Village). Architects, Zantzing, Borie & Medary, Otis Building, Philadelphia. Engineer, L. J. H. Grossart, Bethlehem, Pa. Town Planner, Thomas W. Sears, 1424 Walnut street, Philadelphia. Owners, U. S. Government, Department of Labor, Bureau of Industrial Housing and Transportation, Washington, D. C. Brick, concrete blocks and brick, 2½ stories, various sizes and styles, from 22½x4 feet to 17x30 feet, slate, composition or slag roof, cement and hemlock floors, hot air heating, electric lighting, concrete foundations. Owners taking bids, due August 12th. Warren-Moore Co., Colonial Trust Building; Irwin & Leighton, 126 North Twelfth street, Philadelphia, are figuring.

Bridge, Brookhaven, Delaware County, Pa. Engineers, W. A. Courtenay, Jr., Marcus Hook, Pa., and Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owners County Commissioners, Court House, Media, Pa. Reinforced concrete, 2 stories, 31½ feet and 22x30 feet wide. Owners taking bids, due August 12th at 10.30 A. M. Pomeroy Const. Co., 1609 Ransdell street; Chester Const. Co., Otis Building, Philadelphia, and Edward Riley, Chester, Pa., are figuring.

Farm School Building, vicinity of Doylestown, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Stone, 3 stories and basement, 33x66 feet, slate roof, stone foundations, electric lighting. Sketches completed. Architect will take bids in about one week.

Residences (24), Brandywine Development, Coatesville, Pa. Architect, W. Lister Walker, 103 Park avenue, New York City. Owners, Midvale Realty Company, Coatesville, Pa. Hollow tile, brick, concrete, wood, 2 stories, 14x25 feet shingle and slag roof, concrete foundations, hollow tile. Owners have received bids.

Engine House Extension and Turntable Pit Addition, St. Clair, Pa. Engineer, private plans. Owners, Philadelphia and Reading Railway Co., care of Samuel T. Wagner, C. E., Reading Terminal, Philadelphia. Reinforced concrete, brick, terra cotta coping, concrete foundations, asbestos roof, wood block floors, metal lath, whitewashing, 20' foot extension to

(7) stalls, 4 L-shaped service pipe pits, 3¼x32½ feet, turntable pit enlargement from 85½ feet diameter to 102 feet diameter. Owners taking bids, due August 12th. Warren-Moore Co., Colonial Trust Building; A. L. Carhart, Penfield Building; F. W. Van Loon, Denckla Building; F. A. Havens & Co., 845 North Nineteenth street; F. W. Mark Cont. Co., Finance Building; H. E. Batton, 1713 Sansom street, and Roydhouse-Arey Co., 112 North Broad street, are figuring.

Engine House and Power House, Saueon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Twelfth and Market street, Philadelphia. Brick, reinforced concrete, terra cotta coping, 1 story, 77x36 feet, 100x200 feet; Coal Pockets, 11x34 feet; Machine Shop, 11x20 feet; Pan House, Locker House and Wash House and Toilet and Lunch Rooms, 27x36 feet, asbestos roof, cement, asphalt, mastic paving floors, slate partitions, concrete foundations, rolled steel sash, waterproofing, roof ventilators, metal lath (6 stalls). Owners taking bids, due August 8th. Warren-Moore Co., Colonial Trust Building, Philadelphia, are figuring, in addition to those previously reported.

Apartment and Store (alts.), 117 Welsh street, Chester, Pa. Architects, Hewes & Son, Crozer Building, Chester, Pa. Owner, James

PENNSYLVANIA

Contracts Awarded

Shop Buildings, Piteairn, Pa., \$1,000,000. Engineer, private plans. Owners, Pennsylvania R. R. Co., care of C. E. Shand, C. E., Broad Street Station, Philadelphia. Brick, steel and concrete, concrete foundations, slag roof, steam heating, electric lighting, cement floors, metal lath, elevators, roof ventilators, rolling steel doors, hollow metal doors. Combination Building, 1 story, 44x15 feet; Iron Rack Build-

ing, 1 story, 24x49 feet; Store House, 1 story and basement, 59x110 feet; Engine House, 34 stalls; Oil and Ice House, 1 story and basement, 66x49 feet; Machine Shop, 1 story, 22½x84 feet. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

Stable, Glenolden, Pa., \$30,000. Architect, private plans. Owners, H. K. Mulford Co., Glenolden Pa. Frame, 2 stories, 56x132 feet,

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asbestos shingle roof, cement floors. Contract awarded to Robert E. Lamb Co., 843 North Nineteenth street, Philadelphia.

Mercantile Building, Fourth and Broadway, South Bethlehem, Pa. Architect, C. F. Spangenberg, 504 Broadway, South Bethlehem, Pa. Owner, Edmund Young, South Bethlehem, Pa. Hollow tile, 1 story, 40x80 feet, slag roof, concrete foundations, hot air heating, electric lighting, tile work, yellow pine and composition floors. Contract awarded to Earl Garber, South Bethlehem, Pa.

Hospital (add.), Northampton, Pa., \$5,000. Architect, L. S. Jacoby, 510 Hamilton street, Allentown, Pa. Owner, Dr. C. Hoff, Sieffried, Pa. Two stories, 26x28 feet. Contract awarded to Allen A. Liebenschper, Fullerton, Pa.

Stores (alts.), (2), 21-23 West Third street, Chester, Pa. Architect, private plans. Owner, Wm. H. Frank, 307 Market street, Chester, Pa. Frame, galvanized iron and glass front, marble work, hollow tile. Contract awarded to R. H. Scroggins, Chester, Pa.

Stores (alts.), Fifth street, Chester, Pa. Architect, private plans. Owners, Hinkson & Turner, Cambridge Building, Chester, Pa. Frame, remodeling, painting, tile and marble work, plumbing. Contract awarded to R. H. Scroggins, Chester, Pa.

Residence, Eighteenth street, Chester, Pa. Architect, private plans. Owner, Wm. S. Brighton, 434 Penn street, Chester, Pa. Brick, 2 stories, 18x41 feet, slate roof, pine floors, hot water heating, electric light, tile work, cement work. Contract awarded to R. H. Scroggins, Chester, Pa.



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Laboratory, Eddystone, Pa. Architect, private plans. Owners, Baldwin Locomotive Works, Eddystone, Pa. Tile, 1 story, 135x60 feet, asbestos roof, cement floors, steam heating, electric lighting, shower baths. Contract awarded to R. H. Scroggins, Chester, Pa.

Garage and Farm Buildings (rebuilding), Elkins Park, Pa., \$15,000. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Howard A. Loeb, Elkins Park, Pa. Stone, 2 stories, 27x33 feet and 67x27 feet, slate roof, cement floors (heating and electric work reserved). Contract awarded to W. John Stevens, Inc., Wyncote, Pa.

Warehouse, Williamsport, Pa., \$40,000. Architect, private plans. Owners, Williamsport Wire Rope Co., Williamsport, Pa. Steel, 1 story, 90x200 feet, steel sash, slag roof. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

Cape May, N. J., \$500,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hollow tile, frame and stucco. Commander's Residence, 2 stories, 32x39 feet; Mess Hall, 1 story, 161x54 feet, wing 57x48 feet; Gate House, 1 story, 83x25 feet; Dispensary, 145x24 feet; Scrub House, 60x25 feet; School, 167x54 feet; Barracks, 2 stories, 108x39 feet; Recreation Building, 1 story, 80x30 feet; Garage, 112x27 feet; Armory, 66x25 feet; Receiving Station, 56x25 feet; Brig, 1 story, 51x25 feet, asbestos shingle and tin roof, steam heating, electric lighting, cement and maple floors, ventilators, cold water painting, kitchen equipment. Contract awarded to Cramp & Co., Denekla Building, Philadelphia.

NEW JERSEY

Construction News

Housing Colony, Elizabeth, N. J. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Stone and brick, stucco on brick, 2 stories (6 and 7 rooms), 15x33 feet and 15x35 feet, slag and composition roof, hot water heating, pine floors. Portion of plans completed.

Naval Air Station, Spec. 3142, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C., or Commandant of 4th Naval District, Twelfth and Chestnut streets, Philadelphia. Frame, reinforced concrete, concrete foundations, ready roofing, wood and cement floors, asbestos, steam heating, electric wiring, metal lath, roof ventilators, dampproofing, plasterboard. Quarters for Officers, 2 stories, 130x36 feet; Barracks, 2 stories, 96x38 feet; Mess and Recreation Hall, 2 stories, 124x51 feet, wing 39x28 feet; Guard House, 2 stories, 27x40 feet; Laboratory and Compressor Building, 1 story, 60x30 feet; Oil Storage and Reclaiming Building, 1 story, 51x25 feet; Wing Dope, Paint and Carpenter Shop, 2 stories, 70x26 feet; Dirigible Storehouse and Fabric Shop, 100x50 feet; Blacksmith Shop, 1

story, 19x16 feet; 2 Blower Houses, 1 story, 28x21 feet; Store House for Hydrogen Cylinders, 1 story, 78x38 feet. Owners taking bids, due August 12th at 11 A. M. Cramp & Co., Denekla Building, Philadelphia, are figuring.

Boat House and Docks, Sepe. 3189, Cape May, N. J. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, care of C. W. Parks, Chief, Navy Department, Washington, D. C. Frame, 1 story, 176x50 feet, ready roof, electric lighting. Lowest bidders, Eaton, Brown & Simpson Co., 90 West street, New York City.

Residence, Trenton, N. J., \$10,000. Architect, R. A. Schuman, 932 Lambertson street, Trenton, N. J. Owner, John Seeger, 130 Factory street, Trenton, N. J. Brick, 2½ stories, 38x30 feet. Owner taking sub-bids.

Normal School (alts.), Trenton, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, State Board of Education, Trenton, N. J. Alterations to locker rooms, toilets. Architect taking bids, due August 9th. Samuel Hilton, I. Harper Clayton, and Burton & Burton, all of Trenton, N. J., are figuring.

Section Base (17 buildings), Spec. 3210,

Proposals

Bonds. Improvements. Equipment.

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 31, 1918.—Sealed proposals will be opened in this office at 3 P. M. August 28, for special repairs at the United States Post Office and Court-house at Binghamton, N. Y. Drawings and specifications may be obtained from the custodian at Binghamton, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Ideals are like stars; you will not succeed in teaching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

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DELAWARE

Construction News

Store and Apartment Building (alt. and add.), Seventh and Market street, Wilmington, Del., \$8,000. Architect, J. D. Thompson, 92 Market street, Wilmington, Del. Owner, Max Keil, 300 East Fourth street, Wilmington, Del. Brick, 3 stories. Plans in progress.

Store Building (3) (alts. and add.), Tenth and Tatnall streets, Wilmington, Del., \$9,000. Architect, J. D. Thompson, 925 Market street, Wilmington, Del. Owner, Cornelius Mundy, 9 East Fourth street, Wilmington, Del. Brick, 3 stories, 36x100 feet. Plans in progress.

Coal Bunkers, Storage Building, Warehouse and Office (alts.), Front and Madison streets, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owner, Conley Bros., on premises. Reinforced concrete and brick, 16x40 and 72x34 feet, stone foundations, electric lighting. Architect is taking bids.

Bank (alts.), Seaford, Del. Architects, Brown & Whiteside, Dupont Building, Wilmington, Del. Owners, Delaware Trust Co., Wilmington, Del. Brick, remodeling interior, new floors, store fixtures, painting and plastering. Ready for bids.

Stores (2), 824 Market street and 621 King street (alts. and add.), Wilmington, Del. Architect, private plans. Owner, J. M. Breunstein, 610 Market street, Wilmington, Del. Brick, 2 stories, 27x31 feet, 43x50 feet, add. 25x25 feet, slag roof, hot water heating, electric lighting, tile and marble work, pine floors, 3 roof ventilators, metal window guards, metal ceilings. Contract awarded to R. H. Seroggins, Chester, Pa.

Store (add.), 610 Market street, Wilmington, Del., \$12,000. Architect, private plans.

Owner, J. M. Breunstein, on premises. Brick, 2 stories, 27x100 feet, add. 27x65 feet. Contract awarded to R. H. Seroggins, Chester, Pa.

Garage, rear 1105 Franklin street, Wilmington, Del., \$1,000. Architect, private plans. Owner, Robert W. Smith, on premises. Brick, 1 story, 18x23 feet, slag roof, cement floors. Contract awarded to A. S. Reed & Bro., 815 Shipley street, Wilmington, Del.

Dwellings (2), Thirty-sixth street, Wilmington, Del., \$6,000. Architects, Pennsylvania and Delaware Development Co., 839 Market street, Wilmington, Del. Owner, Wm. Connelly, Wilmington, Del. Brick, 16x40 feet, slag roof, stone foundations, hot air heating, hardwood floors, trap doors. Contract awarded to Wm. Connelly, Wilmington, Del.

Residence and Bakery (alts.), Ninth and Union streets, Wilmington, Del., \$5,000. Architect, private plans. Owners, Huber Baking Co., Wilmington, Del. Brick, 2 stories, 30x28 feet, slate roof, electric lighting. Contract awarded to Realty Const. Co., Wilmington, Del.

Dwelling, Thirty-fifth street, Wilmington, Del., \$4,450. Architect, Wm. S. Potter, Holly Oak, Del. Owner, John McDermott, 3506 Market street, Wilmington, Del. Stone and brick, 2½ stories, 28x28 feet, slate roof, stone foundations, steam heating, electric lighting, hardwood floors. Contract awarded to Wm. S. Potter, Holly Oak, Del.

Store and Apartment (alts.), northwest corner of Eighth and Tatnall streets, Wilmington, Del., \$3,600. Architects, Brown & Whiteside, Dupont Building, Wilmington, Del. Owners, Turner & Stell, Wilmington, Del. Brick, vapor heating and plumbing. Contract awarded to W. Robelin, Wilmington, Del.

phia, \$2,700. Hebrew Day Nursery (O), on premises. B. Tubin (C), 222 Ritner street, Philadelphia. Alterations.

Barber Shop and Dwelling, 3301 North Fifth street, Philadelphia, \$700. Ross Mucitano (O), on premises. Thomas P. Henry (C), 3347 North Fifth street, Philadelphia. New hot water heating system.

Dwelling, 4243 Sansom street, Philadelphia, \$2,500. H. W. Moore (O), West End Trust Building, Philadelphia. F. Broome (C), 4003 Sansom street, Philadelphia. Brick. Alterations.

Dwelling, 4809 Wayne avenue, Philadelphia, \$400. Thomas McEvoy (O), on premises. James McKeely (C), 4411 Germantown avenue, Philadelphia. Porch, 2 stories, frame.

Store, 2602 East Allegheny avenue, Philadelphia, \$500. C. Keturak (O), on premises. F. Pezzillo (C), 3346 Almond street, Philadelphia. Alterations.

Store and Dwelling, 2658 East Ontario st., Philadelphia, \$585. J. & E. Bisy (O), on premises. F. Pezzillo (C), 3347 Almond street, Philadelphia. Brick, 1 story, 12x16 feet, stone foundations, slag roof.

Garage, Springfield avenue and Ruby street, Philadelphia, \$700. F. R. Grier (O), on premises. E. C. Biddle (C), Real Estate Trust Building, Philadelphia. Brick, 1 story, 21x16 feet, stone foundations.

Store and Dwelling, 1112 Pine street, Philadelphia, \$370. S. Goldberg & Son (O), southwest corner of Eleventh and Pine streets, Philadelphia. Jake Newborn, 1734 North Eighth street, Philadelphia. Alterations.

Theatre, Market street, south side, between Sixteenth and Seventeenth street, Philadelphia, \$3,000. Stanly Theatre Company (O), 1214 Market street, Philadelphia. Henon & Boyle (O), 10 South Eighteenth street, Philadelphia. Expanded metal ceilings, electric work, cabinet work, new floors.

Machine Shop, northwest corner of Twenty-third and Vine streets, Philadelphia, \$12,377. Newton Machine Tool Works (O), on premises. Matthew Sehmidi (C), 1308 North Sixth st., Philadelphia. Brick, elevator shafts, (2) 7x9 feet, (1) 7x8 feet, skylights.

Manufacturing and Storage Building, 717-19 South Twelfth street, Philadelphia. Southwark Smelting and Refining Company (O and C), on premises. Stack of metal, 50 feet high.

Dwelling, 40 West Carpenter street, \$300. Walter Willard (O), on premises. Charles Johnson (C), 5701 Boyer street, Philadelphia. Repair shingle roof.

Dwelling, 49 West Carpenter street, Philadelphia, \$300. W. T. Watson (O), on premises. Charles Johnson (C), 5701 Boyer street, Philadelphia. Repair shingle roof.

Store, 1602 Market street, Philadelphia, \$750. S. Wagnan (O), on premises. B. Bornstein (C), 1510 North Franklin street, Philadelphia. Remodel bulk windows.

Dwelling, 906 North Twenty-first street, Philadelphia, \$850. James McGowin (O), on premises. William J. Robinson (C), 1508 Lombard street, Philadelphia. Brick, 1 story, stone foundations, slag roof, 11x16 feet.

Store, 244 South Twenty-second street, Philadelphia, \$5,000. Daniel Mann (O), on premises. Wm. Ferguson & Son (C), 405 South Second street, Philadelphia. Interior alterations.

Building, 154-56-58 North Eighth street, Philadelphia, \$3,500. John H. Chesnut (O), 819 Perry Building, Philadelphia. Basch & Co. (C), 1426 South Front street. Alterations.

Garage, Island Road and Woodland avenue, Philadelphia, \$3,000. Fels & Co (O and C), Seventy-third and Woodland avenue, Philadel-

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Machine Shop, 420 Moyer street, Philadelphia, \$3,000. James L. Griffith (O), 420 Moyer street, Philadelphia. Wm. C. Stone (C), 2069 East Dauphin street, Philadelphia. Brick, 1 story, 32x100 feet, slag roof.

Seale House, Chestnut street, east of Thirty-second street, Philadelphia, \$2,000. Pennsylvania R. R. Co. (O and C), Broad Street Station, Philadelphia. Brick, 1 story, 24x25 feet, concrete foundations, slag roof.

Dwelling, Haughton and Reister streets, Manayunk, Philadelphia. John J. Tresnan (O), Terrace street, Philadelphia. John J. Hurley & Co. (C), 4416 Cresson street, Philadelphia. Brick, 15x48 feet, 2 stories, shingle roof, hot water heating.

Administration and Nurses Building, Ridge avenue and Jamestown avenue, \$45,000. St. Timothy's Hospital (O and C), on premises. Brick and steel, 2 stories, 37x56 feet, slag roof, steam heating.

Garage, 741 Corinthian avenue, Philadelphia, \$750. J. M. Collins (O), on premises.

M. H. Brown (C), 2718 North Twenty-fourth street, Philadelphia. Brick, 1 story, 15x18 feet, stone foundations, slag roof.

Tenement House, Walnut street, west of Forty-fourth street, Philadelphia, \$18,000. Pasquale Teti (O), 1000 Catherine street, Philadelphia. Whiteall Const. Co. (C), 1000 Catherine street, Philadelphia. Brick, 3 stories, 62x34 feet, slag roof, steam heating.

Alterations and Additions

Tenement House, 2847 Frankford avenue, Philadelphia, \$1,600. Vas & Maier (O), 3163 Frankford avenue, Philadelphia. Harry Bobb (C), 3038 Agate street, Philadelphia. Brick. Alterations.

Stores and Dwellings, 2639-37 West Lehigh avenue, Philadelphia, \$2,000. Charles F. Voight (O and C), on premises. Brick, 1 story, slag roof, 21x20 feet, stone foundations.

Nursery, 364-66 Snyder avenue, Philadel-

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WHAT IS THE PRICE OF A LIFE?

phia. Brick, concrete foundations, 1 story, 33x63 feet.

Manufacturing Building, Naudain, east of Twenty-first street, Philadelphia, \$1,420. Roosevelt Worsteds Mills (O), 2023 Naudain street, Philadelphia. Stewart Bros. (C), 2546 North Ormkey street, Philadelphia. Alterations.

Garage, 5404 Lancaster avenue, Philadelphia, \$500. J. Vinches (O), on premises. Geo. C. Williams (C), 1509 Conestoga street, Philadelphia. Brick, 1 story, 18x19 feet, cement floor, slag roof, concrete foundations.

Factory, 1841 Wylie street, Philadelphia, \$400. King Shoe Co. (O), Nineteenth and Parrish streets, Philadelphia. P. A. Havens & Co. (C), 843 North Nineteenth street, Philadelphia. Alterations. Brick.

Garage, 250 Northeast Boulevard, Philadelphia, \$300. Rosie Cohen (O), 435 Pine street, Philadelphia. Levin Brothers (C), Sixty-fifth and Greenway avenue, Philadelphia. Brick, 1 story, 14x21 feet, slag roof, stone foundations.

Store and Dwelling, Seventeenth and Susquehanna avenue, Philadelphia, \$2,000. Mr. Zitzer (O), 5815 North Broad street, Philadelphia. A. R. Raff Const. Co. (C), 1635 West Thompson street, Philadelphia. Brick. Alterations.

Metal Pickling Building, Wissahickon avenue and Hunting Park avenue, Philadelphia, \$20,000. Edw. G. Budd Manufacturing Co. (O), on premises. Barclay, White & Co. (C), 1713 Sansom street, Philadelphia. Brick, 1 story, 17x26 feet, cement floors, steel sash, concrete foundations, slag roof, cement floors.

Toilet Rooms, Nicetown Station, Philadelphia, \$975. Philadelphia and Reading R. R. Co. (C and O), Reading Terminal, Philadelphia. Brick, 1 story, stone foundations, 6x18 feet.

Shop and Garage, Cambria, east of Midvale street, Philadelphia, \$8,000. Furness, Witky & Co. (O and C), Pier "A," Port Richmond, Philadelphia. Steel, 1 story, irregular size.

Machine Shop, 4825 Garden street, Philadelphia, \$5,000. Hall Gas Engine Co., Inc. (O), on premises. E. E. Hollenback, Inc. (C), 1804 Brandywine street, Philadelphia. Brick and stone, 1 story, 29x40 feet, stone foundations, composition roof.

Dwelling, 6200 Reedeland street, Philadelphia, \$600. M. Gellblum (O), on premises. J. Bender (C), 1817 South Fourth street, Philadelphia. Alterations.

Shop and Garage, Fifth street, east of Twenty-third street, Philadelphia, \$1,000. G. L. Purvis (O and C), 2223 North Fifth street, Philadelphia. Brick, 1 story, 16x47 feet, slag roof, cement floors.

Packing Room, 1826 Venango street, Philadelphia, \$300. Ajax Processing Company (O), on premises. T. Connor (C), 3329 North Sixth street, Philadelphia. Iron on iron, 1 story, 12x24 feet.

Residence, 6041 Drexel Road, Philadelphia, \$500. Cyrus Borgner (O), on premises. Milton W. Young (C), Overbrook, Pa. New shingle roof.

Garage, 2012 Upland Way, Philadelphia, \$600. Overbrook Steam Heat Company (O), on premises. Milton W. Young (C), Overbrook, Pa. Brick, 1 story, 10x16 feet, stone foundations, slag roof, cement floors.

Residence, 8320 Overbrook avenue, Philadelphia. Miss Clara Young (O), on premises. Milton W. Young (C), Overbrook, Pa. New asbestos shingle roof.

The "Builders' Guide" is in its thirty-third year of continuous publication.

How should an architect be paid when employed by the Government in war construction work?

There is no answer!

There would be an answer if we could convert ourselves into a complete and perfect Democracy, if only for the period of the war.

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

What right has the ablest man in the United States to be paid any more than General Pershing? What right has the riveter to be paid more than the private in the ranks?

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

How can a nation founded on the ideal of equal opportunity continue the ancient system of accepting the sacrifice of earnings by millions of men who accept a small wage and risk their life, while others remain behind and gather in profits which in some cases amount to scandalous fortunes? How can you establish any just basis of paying any man or woman for any service in wartime, no matter how or where rendered, except upon the basic premise that he or she shall receive no more for that service than the equivalent scale of wage in the Army or the Navy?

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

And the question is not, what was the price of life yesterday nor what will be its price to-morrow? What is its price to-day, now? What other price has any life than its actual price at this moment? What price do you place on the life of a soldier when he goes over the top? What do you think of him for doing it? How can you take more for your services than you give him for his life? How can any man look upon war profits except with a feeling of disgust? What else can he do with them except give them away? How can he keep them and meet the wondering gaze of the fatherless, the husbandless, the brotherless, or the sonless?

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

Life has different values in times of peace, we may say, according to what it may contribute to human betterment. But the only difference in life value in time of war is that which is measured by the difference in pay received by the General and the private, or

by the Admiral and the jackie. They risk their lives, and the only wage they get is what they are paid for taking the risk. And these men do not think of the price when they go "over the top" or when they face the mine and the submarine. In risking their life, setting no price on it, they have been made free. It is the only way to be made free. To them comes the thrill of a complete abandonment to the service of the nation, pure and undefiled.

We who stay at home cannot risk our lives. Most of us would like to. But we have to content ourselves in giving up the privilege by making our utmost contribution in service of another kind. A perfectly safe kind, for most of us. We are ashamed to take a profit for that service, most of us, and shame on those who are not ashamed.

But suppose this: That all those who stay at home, men and women, were organized into a civilian army, with privates, corporals, lieutenants, majors, colonels and generals, with the same scale of pay that prevails in the Army and the Navy. That we were all fed and clothed and housed as they are in the Army and the Navy. That we were promoted for merit as they are in the ranks and on board the ships. That we, too, were made free to serve without hope of profit, and only given the joy of knowing that it was made possible for us not to take a profit for our labor while our fellows were risking their lives for ours.

Then we could establish an equality of national service. Then we could suspend all equality of opportunity for profit and be able to look our fighters in the face, conscious that we had made the utmost contribution that was possible for us to make. We had given our all and received no more than we pay for theirs.

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

In such a civilian army there would be little need for money. All service and all effort would be commensurably rewarded. We could even carry the principle of democracy to the end and do without money at all. The war would be paid for with labor. We would emerge from it without any indebtedness and in a perfect state of organization. Problems of reconstruction would have no terrors. Relieved of the terrific load of debt and interest, we could restore our equality of opportunity, as far as we cared to, after the war.

But we would have made such strides toward Democracy that the whole world would have seen the value of the lesson. We would look upon life differently and be unwilling to

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permit that disgraceful form of profit which is the curse of modern nationalisms, and the chief monetary wastage of war.

What is the price of a life? How can there be any other standard of payment for any human service in war than the price of a life?

Until we meet that question fully and fairly there is no answer to the question as to what any man should be paid for his services to the nation in time of war. All attempts to fix a fee or determine a rate are only subterfuges. They beg the question. They dodge

the issue. They make patriotism a word of little meaning and they raise questions in the minds of men which we must some day answer. Why not now?

What is the price of a life?

That is the question.

If we cannot answer that, then the question of what an architect should be paid, or what any other man should be paid for wartime service, is nothing more than dust in our eyes.—“*Journal of the American Institute of architects.*”

HOW TO GET GOOD RESULTS WHEN COATING CONCRETE WITH CEMENT

By A. M. Wolf, C. E.

In any locality where the winters are cold with consequent great changes in temperature, the practice of plastering concrete surfaces with cement mortar to remove form marks and smooth up the roughened surfaces left by the forms, has, as a general rule, never proven satisfactory. The variations in temperature, aided and abetted by variations of moisture in the coating, soon play havoc with plastered concrete surfaces. Examples of the poor results to be obtained by plastering and brush coating can be found in almost every locality. Bridges, buildings, walls and abutments so treated may be satisfactory for a time, but in most cases, after about a year, they present a very patchy and spotty appearance, due to the flaking off of the mortar.

The only way that cement mortar can be made to stick on a concrete surface is to prepare it especially for such treatment by casting it with a corrugated surface or by roughening the entire surface after the forms are removed. The cost of such treatment will, in many cases, be much more than some of the better finishes that might be mentioned, and it therefore does not pay to prepare surfaces for plastering, since even then it cannot be depended upon to result in a first class job.

In general, the surface of any concrete work which is mixed wet is coated with a thin film of cement which produces a relatively smooth surface, not considering the lips caused by irregularities of the forms, to which it is difficult to make a mortar coating or wash stick.

It is a well-known fact that a rich mortar, such as is generally used for this work, shrinks much more during the process of hardening in air and expands more rapidly, due to rises in temperature, than the concrete upon which it is plastered.

Prof. Alfred H. White, of the University of Michigan, found by experiment that 1:3 mortars contract from 0.08 to 0.1 per cent,

which is, roughly, $1\frac{1}{2}$ times the contraction of 1:2:4 concrete hardening in air as determined from tests in the Office of Public Roads, Department of Agriculture. This difference in contraction of cement plaster and concrete explains the cracking and chipping off of plastered concrete surfaces. If the mortar does stick for a time, it gradually loses its grip, due to the shrinkage of the mortar while hardening, coupled with the effect of the difference of the coefficients of linear expansion of the mortar and concrete due to temperature changes.

After the cement plaster coat has become cracked and separated slightly from the concrete, water easily finds its way behind it, and, if present when freezing weather comes, the plaster will be forced off by the expansive force of the freezing water. Even when a mortar facing placed at the same time as the concrete is used cases arise where the difference in contraction between the facing and the backing causes cracking and spalling of the surface. The same is true of concrete surfaces coated with a cement wash applied with a brush.

Even when care is exercised by preparing the concrete surface for cement plaster by removing the surface film of cement and roughening it to provide a bond for plaster, the results are, in the majority of cases, unsatisfactory. Various preparations are advertised and sold which are said to give a positive bond between a concrete surface and a cement plaster coat, by applying it to the concrete surface before plastering. These, however, have not been used with any marked degree of success in work exposed to the air.

Cement plaster applied to surfaces which are always damp or under water gives satisfaction in nearly all cases. This is due to the fact that the expansion of the finish and the concrete, while hardening under water or in the presence of moisture, is relatively small

as compared to the shrinkage when cured in air, and more nearly the same for both.

If a concrete surface, as left by the forms, must be finished in some manner for appearance sake, it can be said with truth that plastering or brush coating is simply “jumping from the frying pan into the fire.” Plastered concrete surfaces have been tried and found wanting too often to warrant their specification for any job.

Several methods of surface finish which are more durable and vastly more satisfactory can be employed. The cheapest of these finishes is the one obtained by rubbing the surface of concrete with carborundum or cement bricks before the concrete has thoroughly hardened. The cost of finishing concrete surfaces in this manner ranges from $1\frac{1}{2}$ to 3 cents persquare foot, depending on the nature of the work, i. e., whether plain or broken up by reveals, panels and mouldings. The surface produced by rubbing is of a lighter color than the ordinary concrete surface, is more nearly impervious, does away with form marks, and, in fact, is the ideal method of low cost finish for concrete work.

A most excellent finish was obtained on the concrete work of a boulevard bridge in Chicago by rubbing with carborundum blocks. The surface was obtained as follows: After the forms had been removed and the concrete had seasoned and dried out for a few days, the lips and ridges in the concrete, due to irregularities in the forms, were chipped or filed off with chisel, coarse file or rasp. The surface was then wet and rubbed with a coarse carborundum brick until the surface was fairly smooth. After this, a thin wash of cement and sand was applied and left to dry. The final rubbing was then done with a fine carborundum brick until all the cement wash had disappeared and the surface was as smooth as possible.

Bush-hammering, sand-blasting and acid-washing are used to a considerable extent, but these methods of finishing are too costly for use on the ordinary concrete structure, and are limited to use on the finer class of concrete structures, where beauty is the primary, and cost the secondary, consideration.—“*Building Age.*”

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

“Facts are stubborn things.” Advertise only the truth about your product and watch the result.

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Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
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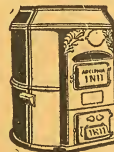
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PHILADELPHIA



Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 33
August 14, 1918

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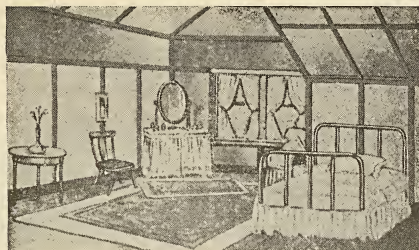
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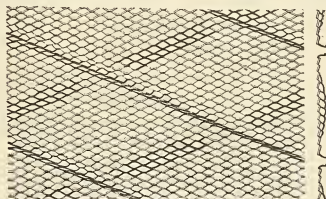
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural Engineering and the Building Trades

PHILADELPHIA
August 14, 1918

VOLUME XXXIII
Number 33

BUILDERS' GUIDE

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and Builders' Guide
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As The Editor Sees It



WE have had occasion recently to quote Hon. William M. Calder, U. S. Senator from New York, in reference to the importance of the building industry in America's win-the-war program. Mr. Calder has before shown himself a keen ally of the building trades and has evidenced a thorough understanding of the part which America's structural activities can play in the present world crisis. His speech before the convention of the Building Industries held in Atlantic City last month is of paramount importance to all interested in any building activity. Mr. Calder said:

I have complained that it was a mistake for the Treasury Department to discourage the building of houses and the financing of building operations. I have pointed out that while in 1915 the total building operations of the country reached the enormous sum of \$1,800,000,000, this year outside of the government construction the total would be less than \$300,000,000. I have indicated, too, that in many of the large cities of the country the failure to build homes for the people has brought about a condition whereby rentals have increased in some instances 50 per cent, and that next year, unless relief is obtained, there would be a dearth of living accommodations for our people. I have not approved either of the Government's going into the business of building homes by the wholesale for its workmen, for I am of the opinion that with the enormous profits made by the great munition and shipbuilding

plants they could in most cases take care of the housing of their own men if the Government insisted that it be done. In this connection it is well to point out that Congress has already appropriated \$110,000,000 for this purpose, and if we are to take the opinion of men who are attached to this house-building bureau of the Government, \$1,000,000,000 will be required in the not far future. This entire scheme, in my judgment, is conducive to waste, inefficiency and extravagance. I have felt that the best results were to be obtained both for the Nation and your industry by disturbing as little as possible the ordinary conduct of your trade.

I think it highly important that an organization should exist in this Nation composed of every element in the building industry so that the Government will be thoroughly informed upon the country's needs and the possibility of meeting them. There exists in Washington the War Industries Board, presided over by Mr. Baruch, which has been performing wonderful service for the Nation. It is the business of this Board to co-ordinate the war needs of the country that the very best results may be obtained from the standpoint of the Government necessities, having in mind always the preservation of the producer's ability to maintain his plant in the highest state of efficiency. I have felt, however, at times, that this Board lacked real information, that very often it was apt to make a decision that might cripple business be-

cause it did not have full knowledge of the facts. An organization such as you have perfected here can be most helpful in laying the facts before this Board.

In his address before the United States Chamber of Commerce in this city some months ago, Secretary Baker said, "There is but one answer to the destruction of the wealth of the world that has been going on, and that is the production of new wealth. Therefore, the primary function of business is to produce." In line with this it is thought by many that the authorities should encourage production in such manner as to improve the national tools of industry, so that they may be operating with increasing efficiency until they are drafted for specific war purposes. This is not business for pleasure, or in the ordinary meaning, business for profit—but business to win.

Luxury building had practically ceased before the war commenced owing to the increased cost of building, which then amounted to approximately 30 per cent; and now, with a proposed further increase of some 25 per cent. in cost of the transportation of building material and the difficulty in securing funds, it is doubtful if any but necessary buildings would be undertaken.

The building industry is a national facility. Its product is in great demand and will be in even greater demand when the war is over. It is therefore in the interest of the public welfare that this national facility should be conserved.

Unless an emergency exists so great

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as to require the United States to risk the future for the present, is it not safer to plan for a war of long duration, so that we may become economically stronger month by month and meet, as the war develops, all emergencies and reverses, rather than to allow the English precedent—which was to release labor, materials and capital for immediate use regardless of the future reaction? But even in their emergency the English policy was not applied to the entire British Empire, and that policy cannot be applied throughout a vast country such as ours, with its different and varying conditions of finance, labor, transportation and climate.

England was compelled to sacrifice her future to her present—but England could take comfort in the knowledge that others stood behind her to carry on business and wealth production. No nation stands behind us. Responsibility for the war, not only in a military, but in a financial and industrial aspect, rests upon us, and the policy of sacrificing the future to the present should gradually be modified with these facts in view. * * *

As a Nation we are drifting from individualism toward various forms of governmental control, and if it is vital for the present and future welfare of the country that these forms of government control should be constructive rather than purely regulative. Moreover, a full knowledge and correct correlation of the facts is impossible at this time, and regulative control based on partial knowledge and incomplete analysis of facts is dangerous. Unfortunately, successive forms of regulative control neutralize one another and become ineffective. * * *

To shut off the wealth-producing industry of a nation is like shutting off the motive power of an airplane—instead of controlled and accelerated progress it means an involuntary landing within a limited radius.

No industry in all the country is more wealth-producing than the building industry. It creates wealth; it makes additional taxable property on which taxes are more easily collected than from any other source. It increases land values, in fact it is the fundamental source of wealth, and if any line of endeavor should be encouraged, it seems to me the one in which you are interested ought to receive the fullest consideration.

In my judgment, it is imperative that you have the Government at Washington understand how all important this whole subject is to the immediate needs of the Nation. The Nation's building operations this year totaled approximately \$1,200,000,000; next year it will hardly exceed \$700,000,000. In many cities of the country there are large numbers of building trade mechanics walking the

streets. It is true, there has been a demand for some of these men in other callings, in the adjustment of business along the line of war necessities, but there will come a time and that very soon when the workmen formerly needed by the building trade will, without the slightest inconvenience to other lines, return to their previous occupations. The country, too, will see the wisdom of encouraging a proper and conservative financing of the Nation's building needs.

* * *

A SUMMARY of what may be accomplished by the War Service Committee of the Building Industries was concisely given by William B. King, General Counsel of the National Association of Builders' Exchanges:

"1. We can render aid to the Government by centralizing our resources and consolidating our information.

2. We can make suggestions in regard to the policy of the Government so as to limit the harm necessarily done and to leave the building industry the largest practicable scope for activity.

3. We can aid in holding the organization of the entire industry during the war so as to resume work with the least possible delay when peace comes.

4. We can serve as a center of education and information for all the branches of our entire industry so that all matters of importance may be disseminated throughout the entire trades."

There is, in fact, no limit to the good results which this organization and its committee may bring about. We have seen so frequently since the war began the dire consequences of lack of organization and centralization and the waste brought about by officials working at cross purposes, each without an understanding of the aims of other officials.

The War Service Committee referred to by Mr. King can, by making a survey of the whole building field, cost and availability of material, labor situation, etc., and by keeping this information up to date, bring about incalculable good to all interested in structural activities and therefore to the country as a whole.

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

REINFORCED CONCRETE GONDOLA FREIGHT CAR.

The reinforced concrete gondola freight car is the newest invention to be put forth as an aid to winning the war. The first cement car is to be built in Chicago in the yards of the M. E. White Paving Company.

Mr. F. E. Sullivan, secretary of the cooperative League of Building Trades and Industries, stated that the contract had been let for the building of a car for experimental purposes. It is to be completed in sixty days.

The experimental car is to have a capacity of 100,000 pounds, a length of forty feet and a width of nine feet. Its cost will be several hundred dollars less than wooden and steel cars of the gondola type, it is said. It will require only 6,000 pounds of steel in its construction, as against 32,000 pounds for the ordinary steel car.

"We know there are many railroad men who say the concrete car is not practicable," Mr. Sullivan said. "There are others who insist that it is. There was the same argument about the concrete boat. We have competent engineers who say a practicable car can be built. If it can it will mean much, for it will relieve the strain on steel mills and transportation facilities for present car construction materials."—"Architect and Engineer," of California.

AN ARTIFICIAL STONE "SECRET."

It has recently been announced that an inventive genius in Florida has discovered "a secret" which will incalculably improve the process of making artificial stone, now so extensively used in building operations. It is claimed for his process that it will give to the artificial product a greater density—specific gravity—greater tensile strength, and general superiority, in every respect, to the natural stone, and yet will render the product susceptible of penetration by a driven nail.

This presents a proposition which, to quote the vernacular, will "jar" all students of such propositions, particularly in the light of the fact that the process is said to be "very simple," one of hydraulics, in good part, and the further fact that sawdust—presumably wood sawdust—enters into the composition, mixed with clay, sand and the secret foundation.

It has been accepted, generally, as a standard theory, that in point of durability, no manner of building material which has, as a component part, even a small percentage of wood, will compare with natural stone or cement, or concrete. Yet this latest inventive genius is accredited with claiming that his process will produce a product as firm as stone, appearance, as either of the other materials mentioned. It is claimed for the new product that it can be given a fine finish—a high polish—on the emery wheel, can be penetrated by a driven nail, yet, when leather dust is employed in the making of it, in combination with the secret foundation, the result is a stone composition which cannot be scratched or otherwise marred by untempered steel,—*"Building Review,"*

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Warehouses, Twenty-second and Oregon avenue, Philadelphia. Architect, private plans. Owners, U. S. Government, Quartermaster's Interior Depot, care of Col. E. B. Morden, 504 Pennsylvania Building, Philadelphia. Brick, concrete, wood and tile, 1 story, 160x120 feet, composition roof, electric lighting. Plans about completed.

Residences (9 pairs), Twenty-first and Chew streets, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, J. M. Chanton, care of Architect. Brick and stucco, 2½ stories, 16x36 feet, slate roof, hardwood floors, stone foundations, hot water heating, electric lighting, tile and marble work. Architect taking bids. Thos. Duff, Eighth and Wyoming avenue, and Chas. J. Yundt, 301 North Tabor Road, additional bidders.

Storehouse, Ellsworth, Alter and 15th streets, Philadelphia. Architect, private plans. Owners, U. S. Government, care of General Radford, United States Marine Quartermasters' Stores, Broad and Washington avenue, Philadelphia. Extension to present buildings. Details undecided. Work contemplated.

Extension to Dry Kiln, Wood Storage Building and Transfer Table, Spec. 3235, Navy Yard, Philadelphia, \$135,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, reinforced concrete, 65x55 feet, concrete foundations, brick and terra cotta, 1 story, 50x63 feet, composition roof, steam heating, electric lighting, rolled steel sash, tin covered doors, concrete floors, hollow tile, dampproofing. Lowest bidder, F. Nardy Co., Bulletin Building, \$82,351.

Medical Research Laboratory, 1829-25 Naudain street, Philadelphia. Architect, J. E. Fieldstein, Penfield Building, Philadelphia. Owners, Polyclinic Hospital, Eighteenth and Lombard streets, Philadelphia. Brick, stone and reinforced concrete, 3 stories, 31x70 feet, slag roof, cement and pine floors, metal lath, rolled steel sash, galvanized iron skylights, fire doors, elevators, metal window guards (elevators, plumbing, heating, electric wiring and office partitions reserved). Architect has received bids.

Warehouse (add.), 410 Race street, Philadelphia. Architects, Savory & Scheetz, Stephen Girard Building, Phila. Owners, Whitehall, Tatum Co. Consists of new toilet rooms. Architects taking bids, due August 16th. H. E. Grau Co.; 1707 Sansom street; F. E. Wallace, 1220 Chancellor street; R. C. Ballinger & Co., 218 North Thirteenth street, and F. A. Havens & Co., 845 North Nineteenth street, are figuring.

Temporary Timber Storehouse, Spec. 3242, Navy Yard, Philadelphia, \$170,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood, frame, corrugated steel

siding, 1 story, 600x180 feet, 800x105 feet, ready roof, concrete floors, concrete foundations, concrete roadways, electric lighting, fire doors. Lowest bidder, M. H. McCloskey, Jr., 1620 Thompson street, \$129,129.

Storage Shed, foot of Morris street, Delaware River, Philadelphia. Architect, Geo. I. Lovatt, 416 Walnut street, Philadelphia. Owners, Baugh & Sons Co., 20 South Delaware avenue, Philadelphia. Frame, 1 story, 100x300 feet, concrete foundations, concrete floors, electric wiring, electric tramway. Architect has received bids.

Bank Building, Front and Norris streets, Philadelphia. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owners, Ninth National Bank, on premises. One story, 21x106 feet, construction undecided. Working plans in progress. Too early for details.

Warehouse, 531-37 North Fourth street and 528-32 North Orianna street, Philadelphia. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care of architect. Brick (slow burning, mill construction), 1 story and basement, 60x178 feet, slag roof, pine floors, electric lighting. Architect has received bids.

Office Building, southeast corner of Morris and Bambergy streets, Philadelphia. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Lutz Co., Inc., 2514 Morris street, Philadelphia. Brick and concrete, 3 stories and basement, 55x44 feet, stone foundations, slag roof, maple, cement and tile floors, electric lighting, fire and kalamain doors, roof ventilators (heating, gas plying, electric wiring reserved). Architects taking bids, due August 14th. Barelay White & Co., 1713 Sansom street; E. E. Hollenback, Inc., 1804 Brandywine street; Frank I. Wintz, 1618 North Twenty-seventh street, are figuring.

Office Building, Richmond and Norris sts., Philadelphia. Architect, private plans. Owners, Wm. Cramp & Sons Co., on premises. Reinforced concrete, 5 stories, 40x60 feet; 9 stories, 24x40 feet, concrete foundations, slag roof, cement floors, steam heating, electric lighting, tile and marble work, terrazzo work, elevators, safety treads, rolled steel sash, fire and kalamain doors, iron stairs. Owners taking bids, due August 14th. Stacy Reeves & Son, 2011 Market street; A. Raymond Raff Cont. Co., 1635 Thompson street, and Warren-Moore & Co., Colonial Trust Building, are figuring.

Pier 27 (repairs), foot of Noble street, Philadelphia. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, care of Paymaster, Navy Yard, Philadelphia. General repairs, new windows, partitions, electric wiring, painting, plumbing, heating, glazing, etc. Owners taking bids, due August 14th. Lam Building Co., 1001 Wood street, and H. H. Wehmeyer, 509 West Cumberland street; Thomas C. Trafford, 1613 Sansom street, are figuring.

Residences (576), Oregon avenue, Bigler street, Seventh to Thirteenth streets, Philadelphia. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Department of Labor, Bureau of Industrial Housing and Transportation, United States Housing Corp., 613 G street, N. W., P. O. Box 1903, Washington, D. C. Owners taking bids on excavating and foundations, reinforced concrete. Cramp & Co., Denckla Building, and Irwin & Leighton, 126 North Twelfth street, are figuring.

Dwellings (91), Shields and Buist streets, Philadelphia, \$310,000. Architect, private plans. Owner, Alexander Ferguson, 5501 Willow avenue, Philadelphia. Brick, 2 stories, 16x35 feet, slag roof, stone foundations, hot water heating, electric lighting. Owner about to start work.

Submarine Battery Storage Building, Spec. 3252, Navy Yard, Philadelphia, \$125,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, hollow tile or wood, 1 story, 341x90 feet, concrete foundations, ready roofing, mastic or cement floors, steam heating, electric lighting, rolled steel sash, metal covered doors, waterproofing. Owners taking bids, due August 19th at 11 A. M. Cramp & Co., Denckla Building; Warren-Moore Co., Colonial Trust Building; W. W. Anstine & Co., 1218 Filbert street; Wm. R. Dougherty, 1610 Sansom street; Thos. Reilly, 1616 Thompson street; Turner Concrete Steel Co., 1713 Sansom street; Lam Building Co., 1001 Wood street; H. H. Wehmeyer, 509 West Cumberland street; Hogg Const. Co., 1634 Sansom street; Wark Co., 1737 Filbert street; M. H. McCloskey, Jr., 1620 Thompson street; J. S. Rogers Co., Drexel Building, and F. W. Mark Cont. Co., Finance Building, Philadelphia, are figuring.

Hospital, Fifth and Fairmount avenue, Philadelphia, \$300,000. Architect not yet selected. Owners, Roosevelt Hospital, care of Dr. Franklin Brady, Fifth and Fairmount avenue, Philadelphia. Fireproof construction, 5 stories, 42x150 feet, concrete floors. Work contemplated.

General Storehouse, Spec. 3231, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, reinforced concrete, brick, hollow tile, 8 stories, steel sash, 183x363 feet, wood or concrete piles, composition, asbestos or asphalt roof, concrete floors, compressed asphalt blocks, steam heating, electric lighting, sheet metal skylights, fire doors, kalamain doors, safety treads, roof ventilators, 2 passenger elevators, 10 electric freight elevators, 2 spiral chutes. Lowest bidder, Industrial Eng. Co., 30 Church street, New York City.

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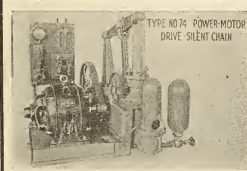
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man
and Interior and Exterior Fitter.

Store and Oil House, Master Mechanic's Office, Tulip and Somerset streets, Philadelphia, \$49,800. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. C., Reading Terminal, Philadelphia. Brick, steel reinforced concrete, terra cotta copings, 1 story, 39x27 x34½ feet, and 2 stories, 18½x38 feet, concrete foundations, asbestos, asphalt and slate roof, granolithic and asphalt mastic floors, steam heating, electric lighting, metal lath, rolled steel sash, fire doors, elevators, concrete walls, concrete inspectors' pit, ornamental iron work, iron stairs. Contract awarded to Pringle Borthwick, 8018 Germantown avenue.

Residence, 750 South Second street, Philadelphia. Architect, J. E. Fieldstein, Penfield Building, Philadelphia. Owner, Dr. L. Bloomberg, care of architect. Brick, 3 stories, 16x70 feet, slag roof, hot water heating, electric lighting, pine floors. Contract awarded to Frank Lucci, 1603 Ellsworth street, Philadelphia.

Garage, 1720-26 Callowhill street, Philadelphia, \$11,700. Owner, George F. Pettinos, 305 North Fifteenth street, Philadelphia. Architect, J. E. Fieldstein, Penfield Building, Philadelphia. Brick, 1 story, 62x115 feet, slag roof, stone foundations, steam heat, electric light, cement floor, gasoline storage system. Contract awarded to Solomon Bros., 263 South Eighth street.

Factory (add.), Sixth and Columbia avenue, Philadelphia. Architects, Day & Zimmerman, 618 Chestnut street, Philadelphia. Owners, Henry Ship Manufacturing Co., Sixth and Columbia avenue, Philadelphia. Frame louveres. Contract awarded to F. A. Havens

& Co., 845 North Nineteenth street, Philadelphia.

Store Building (alts.), 1015 Market street, Philadelphia, \$8,000. Architects, the Hoffman Co., Finance Building, Philadelphia. Owners, Finance Co., Finance Building, Philadelphia. Consists of parquet floors, electric lighting, marble and mosaic work, new bulks, metal lath, etc. Contract awarded to Ketcham & McQuade, 1029 Brown street, Philadelphia.

Gun Plant, Roberts avenue and Juniata street, Philadelphia, \$500,000. Architect, private plans. Owners, Midvale Steel Co., Widener Building, Philadelphia. Steel, brick, reinforced concrete, terra cotta coping. Finished Machine Shop and Half Yard Runway, Rough Machine Shop, Heat Treatment Plant, and Electric Station, 1 story, 562x183 feet, 482x114 feet, 460x74 feet and 120x53 feet, slag and gypsum slab roof, reinforced concrete floors, wood block floors, steam heating, safety treads, iron stairs, rolled steel sash, kinnear doors, metal lath, waterproofing. Contract awarded to Barclay White & Co., 1713 Sansom street, Philadelphia.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

Pennsylvania Construction News

Apartment Houses, Stores, Moving Picture Theatre, Engine House, Etc. (Pembroke Village), Bethlehem, Pa. Architects, Zantzinger, Borie & Medary, Otis Building, Philadelphia. Engineer, L. J. H. Grossart, Bethlehem, Pa. Town Planner, Thos. W. Sears, 1424 Walnut street, Philadelphia. Owners, U. S. Government, Department of Labor, Bureau of Industrial Housing and Transportation, Washington, D. C. Brick, concrete, various sizes and styles, slate, composition or slag roof, cement and hemlock floors, electric lighting, hot air heating. Plans completed. Owners will take bids in a few days.

Automobile Show Room, Store Building, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owners, Penn Realty Corp., Chester, Pa. Stone and brick, 1 story and basement, 84x35 feet, concrete foundations, Carey and tin roof, cement and tile floors, tile and marble work, galvanized iron skylights, metal bulks (heating, electric wiring and painting reserved). Owners taking bids. Hogg Const. Co., 1634 Sansom street, Philadelphia, is figuring.

Bank (alts.), Fourth and Edgemont streets, Chester, Pa. Architect, C. W. Brazier, Crozer Building, Chester, Pa. Owners, Delaware County National Bank, J. H. Roop, president, on premises. General interior alterations, metal work. Plans in progress. Architect will take bids in three weeks.

Office Building (alts. and add.), 418 Edgemont street, Chester, Pa. Architect, C. W. Brazier, Crozer Building, Chester, Pa. Owners, Chester "Times," Wm. C. Sproul, Chester, Pa. Refacing front with marble, and changing interior. Plans in progress.

Residences (1,149) (Pembroke Village), Bethlehem, Pa. Architects, Zantzinger, Borie & Medary, Otis Building, Philadelphia. Owners, U. S. Government, Department of Labor, Bureau of Industrial Housing and Transporta-

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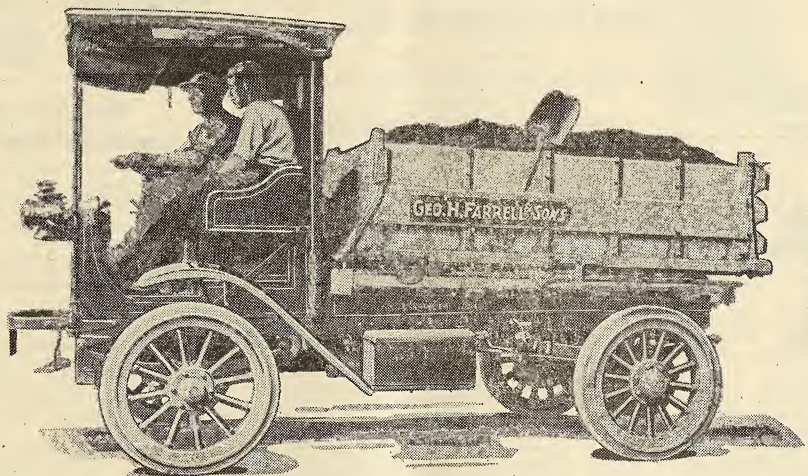
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“I have come to the conclusion that, day in and day out, for the average contractor the two-ton truck is the one to depend on.”

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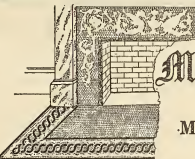
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New Jersey Contracts Awarded

Red Cross House, Wrightstown, N. J., \$20,000. Architect, private plans. Owners, American Red Cross, Wrightstown, N. J. Frame, 2 stories, 40x100 feet, steam heating, electric lighting. Contract awarded to J. S. Rogers Co., Moorestown, N. J.

Kiln Shed (add.), Park avenue, Trenton, N. J., \$1,000. Architect, private plans. Owners, Shaw Pottery Co., on premises. Brick, 1 story, 35x61 feet, asbestos roof, concrete foundations. Contract awarded to Lobatt & Sons, Trenton, N. J.

Garage, Warren street, South Trenton, N. J., \$5,000. Architect, private plans. Owners, Hilderbrecht Ice Cream Co., on premises. Brick and steel, 1 story, 31x72 feet, slag roof, cement floors, concrete foundations. Contract awarded to Aitken Bobbington, 113 South Sioekton street, Trenton, N. J.

Office, Delaware avenue and Pearl street, Camden, N. J. Architect, private plans. Owners, David Baird Co., on premises. Brick, 2 stories, 47x25 feet, slag roof, pine floors, lot water heating, electric lighting. Contract awarded to J. W. Draper Co., 436 Haddon avenue, Trenton, N. J.

Office and Dwelling (add.), 407 Cooper street, Camden, N. J., \$1,200. Architect, private plans. Owner, Dr. Elwell, 407 Cooper street, Camden, N. J. Brick, 2 stories, 9x16 feet, slag roof, steam heating, electric lighting, hardwood floors. Contract awarded to Harry Brown, 530 Bailey street, Camden, N. J.

Retaining Wall and Trestle, Pine street, Camden, N. J. Architect, private plans. Owners, Witches, Martin & Witches, Camden, N. J. Wall 10x2x145 feet, concrete, trestle, 10x9x114 feet. Contract awarded to J. J. O'Leary Co., Passaic, N. J.

Proposals

Bonds. Improvements. Equipment.

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SEALED PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 31, 1918.—Sealed proposals will be opened in this office at 3 P. M. August 28, for special repairs at the United States Post Office and Courthouse at Binghamton, N. Y. Drawings and specifications may be obtained from the custodian at Binghamton, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

tion, Washington, D. C. Engineer, L. J. H. Grossart, Bethlehem, Pa. Town Planner, Thos. W. Sears, 1424 Walnut street, Philadelphia. Brick, concrete blocks and brick, 2½ stories, various sizes and styles, 22x24 feet to 17x30 feet, slate, composition or slag roof, cement and hemlock floors, hot air heating, electric lighting, concrete foundations. Owners have received bids.

School (alts. and add.), Willow Grove, Pa. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owners, Abington Township School Board, Abington, Pa. Stone, second story addition, 48x33 feet, slag roof, steam heating, electric lighting, stairways, pine floors. Owners taking bids, due August 16th. Specht & Sperry, Heed Building; Harry Murphy, Willow Grove, Pa.; W. John Stevens, Inc., Wynote, Pa.; Fred Elvidge & Sons, 5522 Germantown avenue; Fesmire Bros., Willow Grove, Pa., are figuring.

Stores and Apartments, Essington, Pa. Architects, Duhring, Okie & Zeigler, Bailey Building, Philadelphia. Owners, U. S. Government Emergency Fleet Corp., 140 North Broad st., Philadelphia. Brick, 2 stories, 100x200 feet.

Wm. Crawford, 7 East Forty-second street, New York, and Essington, Pa., will build.

Residence (alts. and add.), Devon, Pa. Architect, Wesley Leshner Blithe, 608 Chestnut street, Philadelphia. Owner, George R. Lancaster, 1303 North Broad street, Philadelphia. Stone and rough cast, 2½ stories, 82x50 feet, tin roof, hardwood floors, hot water heating, tile and marble work. Revised plans in progress. Architect will be ready for bids in a few days.

Residence, Nineteenth and Hyatt streets, Chester, Pa. Architect, private plans. Owner, Abraham Brighton, 434 Penn street, Chester, Pa. Brick, 2½ stories, 18x46 feet, stone foundations, slag roof, hot water heating, electric lighting. Contract awarded to R. H. Scroggins, Chester, Pa.

Factory, Marcus Hook, Pa., \$110,000. Architect, private plans. Owners, National Aniline Chemical Co., Marcus Hook, Pa. Reinforced concrete, 2 stories, 106x196 feet, slag roof, steam heating, electric lighting, fire doors, reinforced concrete floors, elevators. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

NEW JERSEY Construction News

Naval Air Station, Spec. 3143, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Bureau of Yards and Docks, Navy Department, Washington, D. C., or Commandant of Fourth Naval District, Twelfth and Chestnut streets, Philadelphia. Frame, reinforced concrete, concrete foundations, ready roofing, wood and cement floors, asbestos roof, steam heating, electric wiring, metal lath, roof ventilators, damp-proofing, plaster board. Quarters for Officers, 2 stories, 130x36 feet; Barracks, 2 stories, 96x38 feet; Mess and Recreation Hall, 2 stories, 124x31 feet, wing 39x28 feet; Guard House, 2 stories, 27x40 feet; Laboratory and Compressor Building, 1 story, 60x30 feet; Oil Storage and Reclaiming Building, 1 story,

51x28 feet; Wing Dope, Paint and Carpenter Shop, 2 stories, 70x26 feet; Dirigible Storehouse and Fabric Shop, 100x50 feet; Blacksmith Shop, 1 story, 19x16 feet; 2 Blower Houses, 1 story, 28x21 feet; Storehouse for hydrogen cylinders, 1 story, 78x38 feet. Owners taking bids, due August 19 11 A. M. Cramp & Co., Denckla Building, Philadelphia, are figuring.

Smoke Stack to Boiler House, Jamesburg, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Boys' Home, care of Mr. Wm. Edmunds, superintendent, Jamesburg, N. J. Brick, 125 feet high, steam heating from boiler house to different buildings. Owners taking bids, due August 28th.

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HEATING

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Miscellaneous Construction News

Steel Storage Shed, Spec. 3238, Norfolk, Va., \$425,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and cement, 1 story, 330x600x30 feet, composition, asbestos, slag roof, metal lath, steel sash. Owners taking bids, due August 19 at 11 A. M. Warren-Moore & Co., Colonial Trust Building, and Cramp & Co., Denekla Building, Philadelphia, are figuring.

Naval Training Camp, Coddington Point, Newport, R. I. Architect, private plans. Spec. 3249, \$4,200,000. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Regimental Quartermaster's Building, Drill Hall, Mess Hall, Guard Quarters, Regimental Office, Brigade Headquarters, Officer Building, Dispensaries, Isolation Building, Swimming Pool, etc. Brick, reinforced concrete, hollow tile, ready, shingle and canvas roofing, concrete, asphalt, mastie and yellow pine floors, metal lath, galvanized steel skylights, roof ventilators, waterproofing. Owners taking bids, due August 26 at 11 A. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, are figuring.

Storehouse and Fuel Oil Wharf, Spec. 3201, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Lowest bid submitted by Hyde & Baxter, 119 Carroll avenue, Takoma Park, Washington, D. C., \$95,110.

Residences (100), Naamans, Del., \$400,000. Architect, private plans. Owners, National Aniline Chemical Co., Marcus Hook, Pa. Brick and stucco, hollow tile, 2½ stories, 20x27½ feet, slate roof, stone foundations, electric lighting, metal lath (heating reserved). Contract awarded to F. W. Van Loon, Denekla Building, Philadelphia.

ARE YOU GOING OR COMING?

Under the heading of "Are You Going or Coming?" questions are described as "a few pointed questions" are addressed to American business men by Mr. W. M. Hart, advertising manager of "Photoplay," the matter occupying a full page in the "Chicago Tribune."

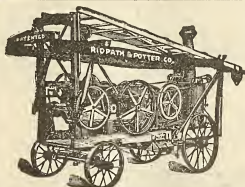
Some of Mr. Hart's points are:

Did you think that you could embalm your business for the period of the war and then resuscitate it at will? It can't be done.

How long do you think your good-will is good for, anyway, if left to itself—even in normal times?

You cannot starve your business and make it win. But you can cut out the frills and give it nourishment!

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MARYLAND Construction News

Parcel Post Office Building, 817-29 North Calvert street, Baltimore, Md. Architect, private plans. Owners, Estate of Francis White, care of Turnbull & Morgan, 12 East Lexington street, Baltimore, Md. Brick, steel and concrete, stone trim, 3 stories, 120x145 feet, sag roof, steam heating, electric lighting, 2 electric elevators, ornamental iron work, fire escapes, metal doors, hollow metal skylights, metal ceilings, ventilators, vault lights, reinforced concrete, fireproofing, dampproofing, hollow tile, plastering, metal lath, painting, plumbing, tile, marble and terrazzo work, composition and wood floors. Owners taking bids, due as soon as possible. Morrow Bros., Fidelity Building; B. F. Bennett Co., 123 South Howard street; West Const. Co., American Building; Edw. L. Walsh, 22 Clay street; Cogswell-Koether Co., 406 Park avenue; C. L. Stockhausen Co., Gay and Water streets, and Price Const. Co., Maryland Trust Building, will figure.

Store (alts.), 138 West Fayette street, Baltimore, Md. Architects, Blanke & Zink, Equitable Building, Baltimore. Owner, Julius Mintz, Equitable Building, Baltimore. Consists of alterations, plate glass, electric lighting, plastering, painting, plumbing. Architects taking bids, due as soon as possible. C. F. Richter, Overlea avenue, and R. H. Frazier, 224 West Mulberry street, are figuring.

Cottage, Kent and Scammel streets, Baltimore, Md. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore. Owners, Bartlett Hayward Co., Scott and McHenry streets, Baltimore. Frame and brick, 2½ stories, slate roof, electric lighting, plastering, painting, plumbing. Morrow Bros., Fidelity Building, Baltimore, will build.

Hospital (add.), Thirty-first and Remington avenue, Baltimore, Md. Architect, private plans. Owners, U. S. Government, Department of Yards and Docks, Navy Department, care of Dr. C. W. Vogel, 1317 F street, Washington, D. C. Laboratories, kitchen and ward buildings. Plans in progress.

Flour and Grain Mill and Warehouse, Elliott City, Md., \$150,000. Architects, A. E. Baxter Eng. Co., Buffalo, N. Y. Owners, C. A. Gambrill Manufacturing Co., 106 Commerce

street, Baltimore. Reinforced concrete and steel, 7 stories, 52x150 feet, slag roof, steam heating, electric lighting, electric elevators, steel and iron work, steel sash, metal doors, fire escapes, hollow metal skylights, ventilators, fireproofing, dampproofing, hollow tile, painting, plumbing, composition floors. Plans in progress. Will be ready for bids in one month.

Packing Plant, Pratt and Entwaw streets, Baltimore, Md. Architect, C. A. Stoutenberg, 120 Broadway, New York City. Owners, Armour & Co., 120 Broadway, New York City. Brick, steel and concrete. Plans in progress.

School, Hamilton, Md., \$50,000. Architect not yet selected. Owners, St. Dominic's R. C. Church, care of Rev. J. B. Manley, Hamilton, Md. Work contemplated.

Housing Colony, Aberdeen, Md. Architects, Sill, Buckler & Penhag, 11 East Pleasant street, Baltimore. Engineers, Norton, Bird & Whitman, 1320 Munsey Building, Baltimore. Town Planner, Stephen Childs, Baltimore, Md. Owners, U. S. Government, Housing Commission of Department of Labor, care of O. M. Eldlitz, Chief, 613 G street, Washington, D. C. Houses (60), frame, 2½ stories, slate roofs, hot air or hot water heating, electric lighting, plastering, painting, plumbing. Plans in progress.

Garage, Pleasant street and Guilford avenue, Baltimore. Architect, D. E. Otto Kubitz, 807 Gursuch avenue, Baltimore. Owner, E. J. Fraher, 2741 St. Paul street, Baltimore, Md. Brick, 1 story, 33x31 feet, slag roof, cement floors, heating, electric lighting, hollow metal skylights, ventilators, plumbing. Plans in progress.

Gardener's Cottage, Glencoe, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore. Owner, Samuel J. Shriver, care of U. S. F. & G. Co., Glencoe, Md. Frame, 2½ stories, shingle roof, electric lighting, plastering, plumbing, painting. Architect taking bids. Glaffeltor & Chambers, 932 West Thirty-sixth street, Baltimore, Md., are figuring.

Equipment for Psychopathic Building, Spring Grove, Catonsville, Baltimore, Md. Architects, Baldwin & Pennington, 330 North Charles street, Baltimore. Owners, Spring

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

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Grove State Hospital, care of Dr. J. Percy Wade, on premises. Consists of electric lighting, steam heating, plastering, painting, plumbing, tile and terrazzo work, dumb waiters. Architects will take sub-bids, due August 20.
Y. M. C. A. Camp Building, Glenbourne and Fort Howard, Md. Architect, private plans.

Owners, War Work Commission, Y. M. C. A., Garrett Building, Baltimore. Frame, 1 story, 35x80 feet, composition roof, hot air heating, electric lighting, painting, plumbing. Owners taking bids. B. F. Bennett Building Co., 123 South Howard street, Baltimore, is figuring.

premises. H. W. Myers (C), 5814 G street, Philadelphia. Frame and stucco, 1 story, 14x18 feet, flexatile shingle roof, cement floors.

Dwelling, Magee and H streets, Philadelphia, \$4,500. Frank Nickels (O), 1313 H street, Philadelphia. H. W. Myers (C), 5814 G street, Philadelphia. Pipless hot air heating, 2 stories, stone and frame, 18x30 feet, flexatile roof.

Garage, Twenty-first and Atlantic streets, Philadelphia, \$2,560. Harry Wehmeyer (O and C), 509 West Cumberland street, Philadelphia. Brick, 2 stories, 26x35 feet, stone foundations. Garage, 522 Tabor Road, Philadelphia, \$495. Frank P. Bottohen (O), on premises. John M. Koeffel (C), 2016 North Fifth street, Philadelphia. Brick, 1 story, 12x19 feet.

MARYLAND

Contracts Awarded

Dwellings (60), Curtis Bay, Md. Architect, private plans. Owners, Standard Steel Car Co., Curtis Bay, Md. Frame and stucco, 2½ stories, slate or tin roofs, hot air and steam heating, electric lighting, plastering, painting, plumbing. Contract awarded to Mellon-Stewart Co., Munsey Building, Washington, D. C.

Residence, 3301 Powhatan avenue, Forest Park, Baltimore. Architect, private plans. Owner, Joseph Goeller, 561 North Linwood avenue, Baltimore. Frame and stucco, 2½ stories, 40x48 feet, slate roof, hot water heating, electric lighting, ventilators, tile work, composition and hardwood floors, vacuum cleaning system, refrigerators, plastering and painting and plumbing. Contract awarded to Murray & Haynes, Garrison and Duval avenues, Baltimore.

Office and Storage Building, Columbia avenue and Putnam street, Baltimore, \$19,000. Architects, Parker, Thomas & Rice, Baltimore, Md. Owners, Bartlett, Hayward Co., Scott and McHenry streets, Baltimore. Concrete foundations, frame, 1 story, 54x72 feet and 40x96 feet, slag roof, steam heating, electric lighting, painting, plumbing, plastering. Contract awarded to Morrow Bros., Fidelity Building, Baltimore.

Housing Colony, Portsmouth, Hampton Roads District. Architects, George B. Post & Son, 101 Park avenue, New York City. Owners, U. S. Government, care of Department of Labor, Washington, D. C., care of Admiral Frederick R. Harris, Bureau of Housing, Hampton Roads District. Residences, Churches, Community Building, etc., total about 1,000 buildings. Contract awarded to Hagerman & Harris, New York City.

Factory (add.), Hudson and Boston streets, Baltimore, Md. Architect, M. N. Loney, Eng., Maryland Trust Building, Baltimore. Owners, American Can Co., Maryland Trust Building,

Baltimore. Brick, reinforced concrete and steel, wood pile foundations, 3 stories, 176x105 feet, slag roof, steam heating, electric lighting, elevators, fire escapes, steel sash, metal doors, hollow metal skylights, ventilators, fireproofing, dampproofing, hollow tile, plastering, painting, plumbing, interior slate work, composition floors. Contract awarded to West Const. Co., American Building, Baltimore, Md.

Office Building, Fidgely and Carey streets, Baltimore, Md. Architect, private plans. Owners, Kidd-Buckingham Lumber Co., 1400 Ridgely street, Baltimore. Brick, 1 story, slag or tin roof, electric lighting, heating, hollow metal skylights, ventilators, plastering, painting, plumbing. Contract awarded to Hicks, Tase & Norris, 106 West Madison street, Baltimore.

Shrapnel Ball Plant, Baltimore and Ohio R. R. and Columbia avenue, Baltimore, Md. Architect, private plans. Owners, John T. Lewis & Bros. Co., care of C. A. Geatty, manager, 1013 East Fayette street, Baltimore, Md. Brick, steel and concrete, 1 story, 50x274 feet, slag roof, steel sash and doors, cement and composition floors. Contract awarded to McIver Const. Co., 803 Law Building, Baltimore, who are taking sub-bids.

Wharf, South Baltimore, Md., \$19,550. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Contract awarded to Cummings Structural Const. Co., Stephen Girard Building, Philadelphia.

Dormitories, Union Station Plaza, Baltimore, Md. Architect, private plans. Owners, U. S. Government, care of Industrial Housing and Transportation Committee, Washington, D. C. Dormitories and halls to accommodate 2,000 workers. Contract awarded to Geo. A. Fuller Co., Munsey Building, Washington, D. C.

Alterations and Additions

Store and Dwelling, 2214 North Front street, Philadelphia. O. M. Crossman (O), on premises. H. Ziegner (C), 2527 North Seventh street, Philadelphia. Alterations.

Storage Building, Cornells, east of Jasper street, Philadelphia, \$3,000. Westmoreland Dye Works (O), on premises. Stewart Bros. (C), 2546 North Orkney street, Philadelphia. Brick, two-story addition, 25x25 feet, slag roof.

Store, Front and Lippincott streets, Philadelphia, \$300. M. Dowling (O), on premises. C. Bonner (C), 2836 North Front street, Philadelphia. Alterations.

Store and Dwelling, 712 Reed street, Philadelphia, \$1,500. Nathan Litman (O and C), 2030 South Fifth street, Philadelphia. Repairs to heating.

Warehouse, 110 Tasker street, Philadelphia, \$800. Atmore & Son (O), on premises. John N. Gill & Co. (C), Otis Building, Philadelphia. Loading platform, brick and cement.

Hall, southwest corner of Broad and Ruscomb streets, Philadelphia, \$5,000. Penn Realty and Cons. Co. (O and C), Ogontz and Chelton avenues, Philadelphia. Brick, alterations.

Rooming House, 1715 Arch street, Philadelphia, \$1,300. George Vaux, Jr. (O), Morris Building, Philadelphia. Charles Hoffman (C), 40 Dickinson street, Philadelphia. Fire escapes and fireproofing.

Offices, Brewster street, south of Island Road, Philadelphia, \$500. Magee & Sons (O and C), on premises. Brick, 1 story, 12x16 feet, stone foundations.

Office Building, Richmond street, south of Norris street, Philadelphia, \$100,000. William Cramp & Sons Ship and Engine Building Co. (O and C), on premises. Brick, 5th, 6th, 7th and 8th story addition, 38x60 feet, and 9th story addition, 48x24 feet.

Blacksmith and Coppersmith Shop, Richmond and Norris street, Philadelphia, \$101. Wm. Cramp & Son Ship and Engine Building Co. (O), on premises. Austin Company (C), Bulletin Building, Philadelphia. Iron on iron, 1 story, 100x284 feet and 50x220 feet.

Offices, 1007 Chestnut street, Philadelphia, \$430. Fidelity Trust Co. (O), 325 Chestnut street, Philadelphia. J. Morris Daniels (C),

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 7335 Tabor Road, Philadelphia, \$300. C. Peter (O), on premises. M. W. Myers (C), 5814 G street, Philadelphia. Frame and stucco,

1 story, 14x18 feet, flexatile roof, cement floor. Garage, Bingham and St. Vincent streets, Philadelphia, \$300. Henry J. Klump (O), on

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

252 South Juniper street, Philadelphia. Interior alterations.

Store and Dwelling, 1445-47 South Fifty-eighth street, Philadelphia, \$500. Wm. Dunleavy (O), on premises. Wm. C. Seull (C), 5600 Willow avenue, Philadelphia. Brick, alterations.

Dwelling, Sixty-eighth avenue and Thirtieth street, Oak Lane, Philadelphia, \$1,000. D. AtAlas (O), on premises. Wm. R. Dougherty (C), 1610 Sansom street, Philadelphia. Alterations.

Store and Dwelling, 1866 North Eighth street, Philadelphia, \$675. D. Boaff (O), 1859 North Eighth street, Philadelphia. Israel Schulman (C), 1119 Bainbridge street, Philadelphia. Brick, alterations.

Boiler House, Passyunk avenue and Twenty-eighth street, Philadelphia, \$350,000. Atlantic Refining Co. (O and C), 3144 Passyunk avenue, Philadelphia. Brick, 1 story, 95x70 feet, steel beams, concrete floors, concrete roof, steel sash.

Dwelling, 1524 Latona street, Philadelphia, \$300. Del Vecchio (O and C), on premises. Brick, 1 story, 11x10 feet, stone foundations, tin roof.

Manufacturing Building, Front and Venango streets, Philadelphia, \$10,500. John M. Kennedy, Jr., 1001 Chestnut street, Philadelphia. Brick, 1 story, 60x110 feet, stone foundations, slag roof.

Garage, Collins, north of Dauphin street, Philadelphia, \$1,800. Frank Flutka (O), 3028 Frankford avenue, Philadelphia. James J. Coven (C), 2032 East Sergeant street, Philadelphia. Stone foundations, brick, alterations, 23x10 feet, 3x23 feet.

Dwelling and store, 1710 South Fourth street, Philadelphia, \$525. F. Leopold (O), on premises. John Schwartz (C), 627 West Moyamensing avenue, Philadelphia. A. P. Fray (C), 319 Market street, Philadelphia. Brick, 1 story, 11x12 feet, slag roof, galvanized skylights.

Mission, Hutchinson street, south of Locust street, Philadelphia, \$11,000. Jos. Sturge, Mission (O), on premises, 918 Locust street, Philadelphia. R. C. Ballinger & Co. (C), 218 N. Thirteenth street, Philadelphia. Fire tower, brick, 10x8 feet, alterations.

Store, 1206 Chestnut street, Philadelphia, \$390. Royal Boot Shop (O), on premises. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Brick, alterations.

Store and Dwelling, Eighteenth and Federal streets, Philadelphia, \$800. G. Toti (O), on premises. A. Mergurio (C), 944 South Sixth street, Philadelphia. Brick, alterations.

Garage, Thirty-third and Powelton avenue, Philadelphia, \$435. American Oncologic Hospital (O), on premises. M. Moister Co. (C), 2931 North Fifth street, Philadelphia. Iron on iron, 1 story, 16x18 feet.

Rectory, Fourth and Gerritt streets, Philadelphia, \$300. Archbishop Dougherty (O), Eighteenth and Race streets, Philadelphia. Wm. R. Dougherty (C), 1610 Sansom street. Interior alterations, brick.

Nursery, Lehigh avenue, east of Thirty-fourth street, Philadelphia. E. R. Clark (O and C), on premises. Repair fire damages, roof.

Hall and Stores, 5236 Market street, Philadelphia, \$375. M. S. Kaufman (O), on premises. W. M. Richey (C), 5009 Pentridge street, Philadelphia. Alterations.

Dwelling, 6145 Girard avenue, Philadelphia, \$1,800. A. Verdi (O and C), on premises. Brick additions, 16x17 feet, 6x10 feet, slag roof, stone foundations.

Manufacturing Building, Lawrence and Cal-

lowhill streets, Philadelphia, \$500. S. H. French & Co. (O), Fifth and Callowhill streets, Philadelphia. H. W. Ellis (C), 244 North Fourth street, Philadelphia. Repair fire damages.

Manufacturing Building, 1737 North Howard street, Philadelphia, \$1,000. Robert Beatty & Bro. (O and C), 2321 East Fletcher street, Philadelphia. Brick, alterations.

Garage, 1226 North Hancock street, Philadelphia, \$1,000. James Creevy (O), 1233 Palethorpe street, Philadelphia. Wm. Butterworth (C), Twenty-eighth and Lehigh avenue, Philadelphia. Brick, 1 story, 17x30 feet, slag roof, stone foundations.

Warehouse, Willard and Agate streets, Philadelphia, \$20,000. David Lupton & Sons (O and C), on premises. Fireproof construction, 50x206 feet, 1 story, brick.

Dwelling, 2720 Brown street, Philadelphia, \$800. Baldwin Locomotive Works (O), Broad and Spring Garden streets, Philadelphia. Andrew Schwinels, Jr. (C), 2731 Girard avenue, Philadelphia. Repairs.

Oil House, Forty-ninth and Parkside avenue, Philadelphia, \$3,500. Pennsylvania R. R. Co. (O and C), Broad Street Station, Philadelphia. Steel, 1 story, 16x48 feet, concrete foundations.

Dwelling, 404 North Sixty-fourth street, \$300. A. Valeriano (O and C), on premises. Brick, two-story addition, 13x10 feet, stone foundations, slag roof.

Mill Building, Fifty-eighth and Gray's avenue, Philadelphia, \$12,000. Unith Const. Co. (O), Fifty-seventh and Gray's avenue, Philadelphia. John N. Gill & Co. (C), Otis Building, Philadelphia. Brick, 1 story, 80x80 feet, slag roof, stone foundations.

Office Building, Thirty-sixth and Gray's Ferry Road, Philadelphia, \$16,500. Barrett Manufacturing Co. (O), on premises. John N. Gill & Co. (C), Otis Building, Philadelphia. Third story addition, 122x41 feet, slag roof.

Residence, 6508 North Ninth street, Philadelphia, \$400. J. Hoffer (O), Oaks, Pa. C. E. Lloyd, Jr. (C), Oak Lane, Philadelphia. Partitions and closet, bath room.

Dwelling, 1330 Spruce street, \$400. Penna. Co. (O). J. Morris Daniels (C), 252 South Juniper street. Brick, 1 story, 8x5 feet, stone foundations, slag roof.

Machine Shop, east side of Stokely street, north of Westmoreland street, Philadelphia, \$85,000. Heor Manufacturing Co. (O), Adams and Gaul streets, Philadelphia. Anstin Co. (C), Bulletin Building, Philadelphia. Iron on iron, 1 story, 200x160 feet.

Hospital, Thirty-third and Powelton avenue, Philadelphia, \$2,500. American Oncologic Hospital (O), on premises. Smith-Hardican Co. (C), 1606 Cherry street, Philadelphia. Brick, elevator shaft.

Store and Dwelling, 2570 North Napa street, Philadelphia, \$650. S. Ditlof (O), on premises. B. Tabin (C), 230 Ritner street, Philadelphia. Brick, 1 story, tin roof, alterations.

Tank Supports, Eleventh and Washington avenue, Philadelphia. C. J. Milne & Sons (O and C), on premises. Steel tank supports.

Store and Dwelling, 1115 East Passyunk avenue, Philadelphia, \$300. N. Borrile (O and C), on premises. Two-story rear addition, brick, 12x14 feet, slag roof, stone foundations.

Dwelling, 1841 South Camac street, Philadelphia, \$300. Tony Ruipere (O), on premises. Sam Sioerelli (C), 1813 South Camac street, Philadelphia. Brick, 1 story, 12x11 feet, slag roof, stone foundations.

Dwelling, 2325 West Sergeant street, Philadelphia, \$300. Harry Lee (O), on premises.

Harry Landy (C), 2309 Opal street, Philadelphia. Two-story rear addition, brick, 12x10 feet, slag roof, stone foundations.

Dwelling, 338 Tree street, Philadelphia, \$350. Jake Brotheman (O), on premises. M. Lesse (C), 815 Wintox street, Philadelphia. Brick, 1 story, 10x12 feet, slag roof, stone foundations.

Garage, Fifty-fourth and DeLancey streets, Philadelphia, \$500. M. Carey (O), 5420 DeLancey street, Philadelphia. Edward Holland (C), 4931 Catherine street, Philadelphia. Brick, 1 story, 11x30 feet, slag roof, cement floor, stone foundations.

Garage, 6807 North Tenth street, Philadelphia, \$900. S. Burgoyne (O), on premises. A. R. Raff Cont. Co., 1635 Thompson street, Philadelphia. Concrete foundations, cement floor, hollow tile, 1 story, 17x19 feet.

Church, Broad and Susquehanna avenue, Philadelphia, \$2,000. Archbishop Dougherty (O), Broad and Susquehanna avenue, Philadelphia. R. Atkinson (C), 24 South Seventh street, Philadelphia. Stone, alterations.

Store and Dwelling, 945 North Seventh street, Philadelphia, \$500. R. Joffe (O and C), 960 North Seventh street, Philadelphia. Brick, second story addition, 8x7 feet, slag roof.

Dwelling, 1721 Locust street, Philadelphia, \$1,350. Eaton Cromwell (O), 1721 Locust street, Philadelphia. Boon & Sample (C), 1708 Arch street, Philadelphia. Low pressure heating boiler.

Dwelling, 1105-11 North Third street, Philadelphia, \$775. Paul Myers (O), Franklin and Poplar streets, Philadelphia. Max Kane (C), 871 North Sixteenth street, Philadelphia. General repairs.

TO REMOVE OLD PLASTER.

For removing old plastering, scarcely any tool is more effective than a garden hoe. It will be necessary, of course, first to prepare the way by exposing a small area. After that the blade of the hoe may be hooked under the loose plaster which may be torn away in relatively large flakes. For scraping out the plaster that clings between the lath a mason's trowel is undoubtedly the most efficient tool one can use, though if the plaster sticks tenaciously the flat blade of a spade may be used to advantage.

STONE MEASUREMENT.

Four perch or 100 cubic feet of wall will contain one cord of stone, or 128 cubic feet of undressed stone, and will require one barrel of lime and 5 of sand to lay the same.

A day's work for a mason's helper is moving 4 or 5 perch of stone, mixing and carrying to the mason sufficient mortar to lay the same. A man will lay in one day from 4 to 5 perch of stone (rubble masonry) in sandstone, and 3 in limestone.

An excellent sandpaper block for use on curved surfaces is made by attaching a piece of heavy leather to a split block. The block is first grooved and finished. The leather is then glued to the lower surfaces. The sandpaper is cut to the proper size and glued to the leather.

SAVE MONEY BY UTILIZING WASTE IN CONCRETE—HOW TO DO IT

By Hee H. See.

We have been given the name, unjustly perhaps, of being the most wasteful nation on earth. I say unjustly, because, in the years preceding the war it was not so easy to tell what was waste and what was not. One can waste more than material, and it has been my experience, and no doubt the experience of many of my readers, to watch a dollar's worth of time being wasted to save a nickel's worth of material. In normal times, when it costs more to save a thing than the thing is worth, saving becomes a waste. The American contractor, with his high wage rate can afford, nay, is often compelled, to let material go to waste that the European contractor with his lower wages could quite profitably save.

These are not normal times, however, and the matter of saving everything, time, material and energy, has been removed from the realm of personal expediency or inclination to that of national necessity and patriotic duty.

The observing executive, studying conservation, is in a position to see many things; some deplorable, some worth while and some strange and curious. Amongst the latter may be mentioned the man who is so extremely careful not to waste the smallest amount of neat cement, but who yet seems to think nothing of wasting several shovelfuls of it after it has been mixed with sand and gravel and made three times as costly or valuable.

Cement delivered on the job is worth exactly what you can get more cement delivered for. Cement that has been handled once, twice or more times must have the cost of handling added to that of the cement, and it is, or should be, worth that much extra. If you once get to thoroughly realize this, you will probably save a little money by avoiding unnecessary handling.

On small jobs, such as the concrete work on the average dwelling, one place where it is difficult to avoid waste is in the last batch needed to fill the form. The size of the batch is nearly always governed by the sack of cement; such as a one-sack batch, two-sack batch, etc., and no matter how much time is used up figuring on this last batch there will nearly always be some mixed concrete left over after the form is filled. This overplus is disposed of in various ways, according to the nature of the workmen. If there is only a small amount, some men will try to avoid wasting it by filling the forms heaping full; this practice usually results in a loss of time when we come to placing the woodwork. Others will simply throw the extra concrete into some convenient corner and forget about

it. Forget about it until some days later, when they discover that a couple of small piers are needed for the back stairs, or an extra post is needed under the porch; then, while growling about the time wasted in setting up the mixing board, they remember the wasted concrete with painful regrets.

To avoid these regrets the writer has evolved the following scheme: Forms are made of scrap lumber, 16 to 20 inches square and 6 inches deep. These are filled with the extra concrete, and when thoroughly set are used for footings. No matter how many of them there are, they are usually all used up before the job is completed.

Tapered forms are also used. These are made 12 inches square on the bottom, 8 inches square at the top and 12 inches high. They are best filled by turning them upside down. In combination they serve very well for interior piers.

If the mixing board can be left where it is without being in the way, the forms may be filled and left standing on it. Otherwise, they may be placed on a few scraps of board, or, in the case of the larger forms, merely on the level ground.

Those footings not used could be carried away at the close of the job, but this we have never done. As already stated, there are usually a number of places where they can be used to advantage, and if there are any left, we can nearly always make the owner feel happy by presenting them to him.

The flat footings are the more serviceable; they can be used to make a walk to the side gate, to make a splash stone or bucket stand under the lawn hydrant, to make a stand for the refrigerator in the basement, or in other ways that will readily occur to the one who has them to dispose of.—"Building Age."

HOUSING AND WAR WORK CONNECTED.

The Council of National Defense makes this statement in a circular letter sent to the several State Councils of Defense:

"Housing and war work are vitally connected. A man who raises crops, turns shells or builds ships must have a place in which to live. His health and efficiency are directly dependent upon housing conditions. Adequate and satisfactory housing is thus one of the outstanding needs of the day."

"Camouflage" doesn't pay in advertising. Don't call your cannon a bit of landscape. Be honest and gain the confidence of the public.

Where the Newspaper "Counts" and Where it "Fails"

There are lines of business that are helped by newspaper advertising, but if you will take the trouble to look them up you will discover that they are lines in which the manufacturer is either dealing direct with the consumer or is selling something which is adaptable to general use.

Safety razors, dental creams, rubber heels belong in this category.

Everybody has use for them. The object of the advertising is confined largely to an effort to emphasize the advantages of certain makes over certain other competing makes. "Ad" men call that kind of advertising "building up a trade-mark" because its primary purpose is to fix a given make in the mind of the consumer to the exclusion of all other makes.

Building-trades advertising is quite a different story.

Here, you are selling something in which only a limited class may be said to have any interest.

If you could dig up a newspaper every copy of which found its way into the hands of an architect, or a builder, or a sub-contractor, or a building owner, it would pay you to hand up a rate of eighty cents an agate line for space.

But you can't.

When you buy space in the newspaper you pay for circulation probably ninety-eight per cent. of which represents, so far as you are concerned, dead waste.

In the building magazine this condition is diametrically reversed. As every copy goes to a reader directly interested in building, you are buying a circulation one hundred per cent. clear business prospects.

And the circulation being smaller by many thousands you are paying a very much easier rate and getting a very much more desirable "position."

You can't doubt this.

It's self-evident.

When the product to be advertised is anything to be used in building your medium is

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building
Trade Publication.
Perry Building, Philadelphia.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

Portland Cement, Sand or Gravel by the carload. Consult **DAVID FRANCE CO.**,
Tasker Street Wharf, Delaware River, Philadelphia.

Reference Directory for Architects, Builders and Owners

- Artesian Wells.**
 Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.
 Ridpath & Potter Co., Bourse Bldg., Phila.
 John B. Rulon, 1355 Colwyn st., Phila.
- Artists' and Architects' Supplies.**
 Chas. H. Robbins, 125 S. 11th st., Phila.
 Warren-Knight Co., 136 N. 12th st., Phila.
 F. Weber & Co., 1125 Chestnut st., Phila.
- Blue Prints.**
 Chas. H. Robbins, 125 S. 11th st., Phila.
 F. Weber & Co., 1125 Chestnut st., Phila.
- Blue Print Paper.**
 Chas. H. Robbins, 125 S. 11th st., Phila.
- Brick (Face, Etc.).**
 O. W. Ketcham, Builders' Exchange, Phila.
- Brick Renovating.**
 Adolph Christensen, 1433 Brown st., Phila.
- Builders.**
 Hogg Construction Co., Inc., 1634 Sansom st., Phila.
 Mitchell Bros., 1125 Race st., Phila.
 Pomeroy Const. Co., 1609 Cansted st., Phila.
- Builders' Supplies.**
 P. H. Fairlamb Co., 115 S. 30th st., Phila.
 David France Co., Tasker st. wharf, Delaware River, Phila.
- Builders' Equipment.**
 Service Equipment Co., Bourse Bldg., Phila.
- Cement.**
 P. H. Fairlamb Co., 115 S. 30th st., Phila.
 David France Co., Tasker st. wharf, Delaware River, Phila.
 Lehigh Portland Cement Co., Finance Bldg., Phila.
- Columns (Metal).**
 Pearce Fireproof Co., 1345 Arch st., Phila.
- Composition Flooring.**
 The Barrett Company, New York and Philadelphia.
 Philadelphia Mineral Flooring Co., 5632 Summer st., Phila.
- Woodoleum Manufacturing Co.,** 203 Liberty Bldg., Phila.
- Dampproofing.**
 The Barrett Co., New York City and Phila.
- Drawing Materials.**
 Charles H. Robbins, 125 S. 11th st., Phila.
 F. Weber & Co., 1125 Chestnut st., Phila.
- Electrical Construction.**
 Baird-Osterhout Construction Co., 1620 Chancellor st., Phila.
- Elevators.**
 A. B. See Electric Elevator Co., Colonial Trust Bldg., Phila.
- Engineers' Supplies.**
 Charles H. Robbins, 125 S. 11th st., Phila.
 Warren-Knight Co., 136 N. 12th st., Phila.
 F. Weber & Co., 1125 Chestnut st., Phila.
- Fences.**
 Anchor Post Iron Works, Real Estate Trust Bldg., Phila.
- Fire Doors.**
 Merchant & Evans Co., 2035 Washington ave., Phila.
- Fireproofing.**
 General Fireproofing Co., 832 Arch st., Phila.
 Henry S. Harris, Land Title Bldg., Phila.
 Pearce Fireproof Co., 1345 Arch st., Phila.
 Truscon Steel Co., Commonwealth Bldg., Phila.
- Floor Plates.**
 Alan Wood Iron and Steel Co., Widener Bldg., Phila.
- Furnaces and Ranges.**
 Borden Stove Co., 1311-13 Arch st., Phila.
 Henry M. Miller, 46-48-50 N. 2d st., Phila.
 Richardson and Boynton Co., 1332 Arch st., Phila.
- Garage (Portable).**
 Service Equipment Co., Bourse Bldg., Phila.
- Granite.**
 Holmesburg Granite Co., Commercial Trust Bldg., Phila.
- Hauling Contractors.**
 Barber Contracting Co., 1127 Land Title Bldg., Phila.
- Heating Contractors.**
 Bowers Bros. & Co., 1629 Ludlow st., Phila.
- Heating Boilers.**
 Borden Stove Co., 1311-13 Arch st., Phila.
 Fleck Bros. Co., 44 N. 5th st., Phila.
 Richardson and Boynton Co., 1332 Arch st., Phila.
- Insurance.**
 Harris J. Latta, Penna. Bldg., Phila.
 Insurance Co. of North America, 3rd and Walnut sts., Phila.
- Levels.**
 Warren-Knight Co., 136 N. 12th st., Phila.
- Lighting Fixtures.**
 Staman & Dickey, 30 S. 16th st., Phila.
- Lumber.**
 James E. Tague & Co., 10th and Columbia ave., Phila.
- Marble Mosaic.**
 Belfi Bros. & Co., 1923 Market st., Phila.
 Italian Marble Mosaic Co., 433 Spruce st., Phila.
- Metal Lath.**
 General Fireproofing Co., 832 Arch st., Phila.
 Pearce Fireproof Co., 1345 Arch st., Phila.
 Truscon Steel Co., Commonwealth Bldg., Phila.
- Meters.**
 Philadelphia Meter Co., Real Estate Trust Bldg., Phila.
- Mill Supplies.**
 The Fairbanks Co., 7th and Arch sts., Phila.
 Service Equipment Co., Bourse Bldg., Phila.
- Paints and Varnishes.**
 The Barrett Company, New York and Philadelphia.
 Felton, Sibley & Co., 136 N. 4th st., Phila.
- Pipe Fittings and Valves.**
 The Fairbanks Co., 7th and Arch sts., Phila.
- Plumbing Fixtures.**
 Fleck Bros. Co., 44 N. 5th st., Phila.
 James A. Vogel Co., Wilmington, Del.
 Keystone Supply & Mfg. Co., 913 N. 9th st., Phila.
- Preservatives (Wood and Concrete).**
 The Barrett Co., New York City and Phila.
- Ranges.**
 Borden Stove Co., 1311-13 Arch st., Phila.
 Henry M. Miller, 46-48-50 N. 2d st., Phila.
 Richardson & Boynton Co., 1332 Arch st., Phila.
- Refrigerators.**
 Borden Stove Co., 1311-13 Arch st., Phila.
 Henry M. Miller, 46-48-50 N. 2d st., Phila.
- Reinforcing Bars.**
 Truscon Steel Co., Commonwealth Bldg., Phila.
- Roofing.**
 The Barrett Co., New York City and Phila.
- Roofing Tile.**
 O. W. Ketcham, Builders' Exchange, Phila.
- Scales.**
 The Fairbanks Co., 7th and Arch sts., Phila.
- Sewer Pipe and Flue Linings.**
 C. F. Shellenberger, Builders' Exchange, Phila.
- Sewage Disposal.**
 Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.
- Soundings.**
 Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.
 Ridpath & Potter Co., Bourse Bldg., Phila.
 John B. Rulon, 1355 Colwyn st., Phila.
- Sprinklers.**
 Merchant & Evans Co., 2035 Washington ave., Phila.
- Surety Bonds.**
 Harris J. Latta, Penna. Bldg., Phila.
- Terra Cotta (Architectural).**
 O. W. Ketcham, Builders' Exchange, Phila.
- Test Borings.**
 Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.
 Ridpath & Potter Co., Bourse Bldg., Phila.
 John B. Rulon, 1355 Colwyn st., Phila.
- Tile and Terrazzo Work.**
 Belfi Bros. & Co., 1923 Market st., Phila.
 Italian Marble Mosaic Co., 433 Spruce st., Phila.
- Transits.**
 Warren-Knight Co., 136 N. 12th st., Phila.
- Ventilators.**
 Merchant & Evans Co., 2035 Washington ave., Phila.
- Wall Board.**
 Wall Board, Cell Board.
- James E. Tague & Co.,** 10th and Columbia ave., Phila.
- Water Paint.**
 Wm. B. Southern, N. W. Cor. 12th and Spruce sts., Phila.
- Waterproofing.**
 The Barrett Co., New York City and Phila.
- Water Supply.**
 Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.
- Weather Strip (Metal).**
 Diamond Flexible Metal Weather Strip Co., Geo. R. C. Johnston, Drexel Bldg., Phila.
 C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.
- Window Screens.**
 C. W. MacDowell Agency, 2132 N. Van Pelt st., Phila.
- Wire Work.**
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126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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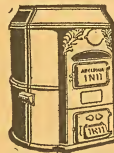
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Vol. XXXIII., No. 34
August 21, 1918

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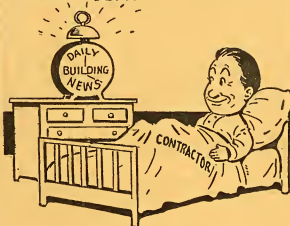


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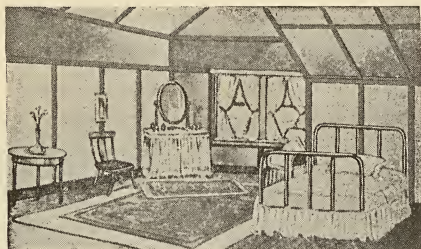
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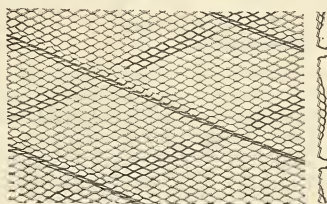
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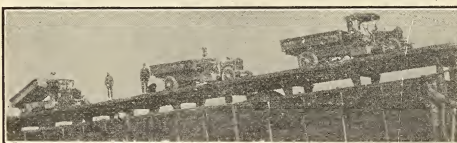
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 34

PHILADELPHIA
August 21, 1918

BUILDERS' GUIDE

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and Builders' Guide
PUBLISHED WEEKLY

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As The Editor Sees It



REVOLUTIONS never go backward" said Wendell Phillips, and this statement is being emphasized by the revolution in methods and customs the world over. A new era has come with new problems to be solved and the old can never return. Indicative of the change is the fact that in the midst of the war, when America is putting her all into the struggle, preparations are being made on every hand to meet the demands of peace. Reconstruction, readjustment are the words in every mind. Every move that is made is considered in relation to its effect on conditions after the war.

President Wilson has already instructed the National Council of Defense to make a survey of the problem of readjustment and reconstruction after the war. The Council will study available data and submit a general plan correlating the various units of readjustment and constructive work. The building industry is cited as an example of industries which have been curtailed through the war and must be restored. Other problems to be considered are the reabsorption of industrial war workers into peace industries; the industrial relationship between labor and capital; foreign trade problems; the tariff industrial and scientific research, etc.

This spirit of revolution pervades every phase of the building industry from architecture to city planning, from the building of a working man's home to the planning of an industrial city. And the

work along these lines is planned not as a temporary makeshift, but as a permanent institution, to meet the new demands of the country after the war. At the National Conference on War Housing, held in Philadelphia recently, Mr. Thomas Adams, discussing the problem, said:

"Take a large view of this question. Establish these new communities upon a permanent basis. Create garden cities now because you have an opportunity you never had before, and recognize that in this country you are increasing your population twenty or twenty-five millions every fifteen years and that if you build houses with 100 or 200 million dollars of government money you are only building one-sixth of the yearly demand for new houses in this country and you need have no fear of the danger of having an excessive supply after the war. Do not fail to recognize that you had a housing problem before the war and that you are going to have a housing problem after the war quite independent of the conditions created by the war. That, I think, ought to have a considerable influence upon the method of approach and the consideration which you apply to this question of war housing conditions."

In the needs of the house we are indeed, prone to lose sight of the demands of the future, and yet the solution of the war housing problems problems are in reality most important in their bearing on the housing situation after the war, for the readjustment then will be quite

as serious and difficult as the adjustment to war conditions has been, and America will again be called upon to help in the reconstruction.

The solution of the housing problem is just begun and now is the time to consider and plan; building activities are more or less curtailed and there is opportunity now for thoughtful planning for the great building future which is sure to follow. Urging this sentiment Mr. Mark C. Cohn says in "The Architect and Engineer of California:"

"Men from all our cities are now in France. That little war-torn nation is making city plans in these times for the rebuilding necessary as soon as the war is over and is establishing zone ordinances and building regulations. They are tearing out factories and moving them to other districts, preparing for the building of model housing projects, applying the English garden city principles to these projects and providing for those things that will be conducive to the best conditions for the workers. If France can do these things in the midst of war, American cities may well profit by the example.

"The ideal in better housing is possible only when permanency is assured. Housing of the right kind is as important as medicine and surgery. One is preventative while the other is palliative.

"Sensible zoning, city planning and housing ordinances in all cities is in the interest of better business. Misunder-

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standings and consequent opposition is bound to develop, but it will be largely ignorant and selfish opposition and unwarranted. This opposition largely comes from the same class of people who oppose every kind of progressive legislation."

What wonderful opportunities present themselves now to the city planners.

The work of the city planner demands a man of unusual and comprehensive qualifications as is made clear by B. R. Maybeck, A. I. A. in the "Architect and Engineer." "The city planner evidently must have the vision and a good study of design required to produce an architect. He must also have understanding

of engineering, particularly of practical building requirements and of municipal engineering improvements. He should have some knowledge and feeling for planting parks and landscape design. Yet, if he cannot balance this knowledge and apply it with an understanding of the laws of economics, sociology and municipal government his city plans are not likely to go ahead, however worthy in design they may prove.

All of which reminds us forcibly that the revolution is at work; that the time for preparation is here; that other problems are only beginning; that we must forge ahead for, in truth, "revolution never goes backward."

CORRECT LIGHTING OF SCHOOL BUILDINGS

The importance of the proper lighting of school buildings will be understood when it is stated that there are in the United States 20,000,000 school children working at their desks several hours a day. According to statistics, about 10 per cent. of these have defective vision.

In order to improve school lighting as far as possible, the Illuminating Engineering Society has formulated a code of lighting for school buildings, making available the best information extant with regard to this subject.

One of the conditions most productive of eye-strain is the glare of an unshaded lamp. The glare from a bright, reflecting surface will also produce this condition in a greater or lesser degree, depending upon the degree of reflection. To remedy this, all lamps should be suitably shaded. They should also be so arranged as to secure a good distribution of light on the work, avoiding objectionable shadows and sharp contrasts.

Walls should have a moderate reflection factor; the preferred colors are light gray, light buff, dark cream and light olive green. Ceilings and friezes should have a high reflection factor; the preferred colors are white and light cream. Walls, desk-tops and other wood-work should have a dull finish.

Basements, stairways, store rooms, and other parts of the building where required, should have switches or controlling apparatus at point of entrance.

Emergency lighting should be provided at main stairways and exits to insure reliable operation when, through accident or other causes, the regular lighting is extinguished.

All parts of the lighting system should be properly maintained to prevent deterioration due to dirt accumulation, burned-out lamps and other causes. To insure proper maintenance, frequent inspection should be made at regular intervals.

One of the fundamental rules for proper lighting of desks is to have the preponderance of light come from the left side. For this reason many school authorities advocate un-

ilateral lighting, that is, lighting by windows located on one side of the room only, especially for class rooms. This method of lighting is recommended where the rooms do not exceed about 24 feet in width, with windows about 10 feet. If the rooms are much wider than this, bilateral lighting, that is, lighting by windows located on to sides of the room, may be required in order to provide sufficient illumination in every part of the room and at the same time to prevent too great a diversity of contrast in the intensity of light on the work spaces.

To secure the highest lighting value it is recommended that the room be so designed that no working location is more distant from a window than one and one-half times the height of the top of the window from the floor.

Windows at the left and rear, where practicable, are preferable to those on the left and right sides of the room, because of cross shadows created by the latter arrangement. Lighting by overhead sources of natural illumination, although sometimes used for assembly rooms, auditoriums and libraries, with relatively high ceilings, has ordinarily little application in class rooms and has found little favor in practice.

The sky as seen through a window is a source of glare. For this reason the seating arrangements should always be such that the occupants of the room do not face the window.

Tests of daylight in well lighted school buildings indicate that, in general, the glass area does not fall below 20 per cent. of the floor area.

As the upper part of the window is more effective in lighting the interior than the lower part, it is recommended that the windows extend as close to the ceiling as practicable.

The lighting value of a window, at any given location in the room, will depend upon the brightness of the sky, the amount of sky visible through the window at the given location in the room, and indirectly upon the re-

flection factor of the surroundings and the dimensions of the room.

Observations in well-lighted school rooms having a comparatively unobstructed horizon, show that under normal conditions of daylight, satisfactory illumination is usually obtained when the visible sky subtends a minimum vertical angle of 5 degrees at any work point of the room.

In cases in which the horizon is obstructed, as by adjacent high buildings or by high trees, provision should be made for a larger window area than would otherwise be required; also if need be, for redirecting the light into the room by means of prismatic glass in the upper sashes of the windows, or by prisms canopies outside of the windows.

Although direct sunlight is desirable in interiors from a hygienic standpoint, it is often necessary to exclude or diffuse it by means of shades. These shades should perform several functions, namely, the diffusion of direct sunlight, the control of illumination to secure reasonable uniformity, the elimination of glare from the blackboards wherever possible. These requirements make it desirable to equip each window, especially in class rooms, with two shades operated by double rollers placed near the level of the meeting rail. The window shades may thus be raised or lowered from the middle, which provides the maximum elasticity for shading and diffusing the light. The shades should be preferably of yellow-colored material that is sufficiently translucent to transmit a considerable percentage of the light while at the same time diffusing it.

A more complete control of the light may be obtained by the use of two independent sets of shades at each window. Where two sets of shades are used, one should be preferably a very dark green of heavy material that will exclude the light entirely, and the other preferably a yellow-colored material as above described.

It is customary to divide the systems of artificial lighting into three classes, namely, direct, semi-direct, and indirect. This division is arbitrary and the boundary lines are quite indefinite.

A direct lighting system is known as one in which most of the light reaches the work plane directly from the lighting unit, including the accessory, which may be an opaque or glass reflector or a totally enclosing transparent or translucent envelope. Direct lighting systems may be further classified as localized and general or distributing. In the former the units are so placed as to light local work spaces, and in the latter they are well distributed so as to light the whole area more or less uniformly.

A semi-indirect system is known as one in which a portion of the light reaches the work plane directly from the unit and a relatively large portion reaches the work plane indirectly, by reflection from the ceiling and walls. The accessory is usually an inverted diffusing bowl or glass reflector. When this glass has a high transmission factor the lighting effect approaches that of ordinary direct lighting.

(Continued on Page 482.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Apartment House, Tioga, Philadelphia, \$20,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner Name withheld. Brick and stone, terra cotta trimming 2 and 3 stories (12 apts.), slag roof, vapor heating, combination lighting, pine floors. Plans in progress. Architect will be ready for general bids in two weeks.

Warehouse, northeast corner Front and Wiley streets, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owners, Kensington Waist Mfg. Co., care architect. Brick (slow burning construction), 2 stories, 69x100 feet, slag roof, cement and plank floors, electric wiring (elevator, undecided). Plans about completed. Architect will take bids in a few days.

Box Factory, Seventy-third and Woodland avenue, Philadelphia. Architects, Harris & Richards, Drexel Building, Philadelphia. Owner, Fels Co., care Roy Robson, Superintendent, on premises. Brick, 1 story, 100x75 feet, slag roof, cement floors, electric lighting, all metal doors, hollow metal sash and skylights (steam heating reserved). Owners are ready for sub-bids.

Repairs to Train Shed, Roof and Skylights, Reading Terminal, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway, Twelfth and Market streets, Philadelphia. Sheet metal work. Owners have received bids.

Pier No. 27 (Repairs), foot of Noble street, Philadelphia. Owners, United States Government, care Department of Yards and Docks, care Paymaster, Navy Yard, Philadelphia. General repairs, new windows, partitions, electric wiring, painting, plumbing, heating, glazing, etc. Lowest bidders: F. L. Hoover & Son, 1023 Cherry street, Philadelphia, \$32,575, 75 days. Lam Building Co., 1001 Wood street, Philadelphia, \$33,400, 49 days.

Warehouse and Garage, Third street below Green, Philadelphia. Architect Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care Architect. Brick (slow burning construction), 1 story, 100x175 feet, slag roof, electric lighting. Plans about completed. Architect ready for bids.

Warehouse, Gay street above Main, Manayunk, Philadelphia. Architect, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owner, Geo. W. Davis, Ridge avenue below Wigard street, Philadelphia. Wood, 3 stories, 60x88 feet, slag roof, wood floors, elevator, fire doors (heating and electric work reserved). Architects taking bids due August 22. Wm. H. Eddleman & Son, 453 Green Lane, Roxboro, E. L. Cuthbertson, 334 Roxboro avenue, Roxboro, Brown Construction Co., 4600 Main street, and C. M. Swartley, 6835 Ridge avenue, are figuring.

Store Building (alts.), 1019-21 Market street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Samuel Sternberg, Tenth and Filbert streets, Philadelphia. Brick and mill con-

struction, 5 stories, carpentry and mill work, plastering, slag roof, hardwood floors, painting, glazing, iron work (cedar or cypress tank, 10,000 gallon capacity, and necessary foundations reserved), and new front. Architect has received bids.

Residences (16) Northeast Boulevard, Philadelphia, from \$10,000 to \$12,000. Architect, E. Allen Wilson, 1208 Chestnut st., Phila. Owner, Edwin L. Seeds, care of Samuel Shoemaker, Land Title Building, Phila. Brick, stone and stucco, 3 stories, 16½x62 feet, slag, slate, tin and tile roof, hardwood floors, cement work, stone foundations, hot water heating, combination lighting, marble work. Owner is taking sub-bids on all lines.

Hotel (alt. and add.), 219 South Broad street, Philadelphia. Architect, Carl P. Berger, 1416 South Penn Square, Philadelphia. Owner, W. E. Adams, on premises. Brick, 4 stories, 33x130 feet, slag roof, stone foundations, steam heating, electric lighting, tile work, hollow metal sash and skylights, fire and kalamein loors, pine and tile floors, metal ath, roof ventilators, metal ceilings, fire escapes. Architect taking revised bids due August 21. A. L. Freitz & Son, Heed Building, H. E. Gran Co., 1707 Sanson street, F. L. Hoover & Son, 1023 Cherry street, Ketcham & McQuade, 1029 Brown street, Raith Construction Co., 304 Master street, J. Sims Wilson Co., 1125 Brown street, and Chas. C. Pace, aerion, Pa., are figuring.

Club House (alts. and add.), 1841 South Twelfth street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owners, Italian Republican Club, on premises. Brick, three-story addition, 12x 43 feet, slag roof, stone foundations, heating undecided, electric lighting, yellow pine floors, tile and marble work and general alterations to old portion. Plans about completed. Architect will be ready for bids in one week.

Store (alts.), 806 South street, Philadelphia. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, David Snyder, on premises. New flush bulk, hot water heating, electric lighting, marble work, cabinet work, parquetry floor, metal ceiling. Plans completed. Owner is ready for bids.

Chimney, Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel Corp., on premises. Radi brick, 215 feet high, 9 feet diameter. Owners taking bids. Ruc Eng. Co., Pennsylvania Building, Philadelphia, is figuring.

Hotel (alts. and add.), 219 South Broad street, Philadelphia. Architect, Carl P. Berger, 1416 South Penn Square, Philadelphia. Owner, W. E. Adams, on premises. Brick, 4 stories, 33x130 feet, slag roof, stone foundations, steam heat, electric light, tile work, hollow metal sash and skylights, fire and kalamein doors, pine and tie floors, metal lath, roof ventilators, metal ceilings, fire escapes. Architect taking revised bids, due August 21. John A. Yardley, 1716 Sanson street; H. H. Wehmeyer, 509 Cumberland street; Conneen Const. Co., 1737 Filbert street; David

McClelland, 4011 Barin street, additional bidders.

Clothing Issue Building, Training Camp, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Paymaster, Navy Yard, Philadelphia. Owners taking bids, due August 23rd. Thos. C. Trafford, 1613 Sanson street, and Wark Co., 1737 Filbert street; Lam Building Co., 1001 Wood street; F. A. Havens & Co., 845 North Ninth street; John M. Yardley, 1716 Sanson street, are figuring.

Emergency Hospital Buildings, Spec. 3334, Navy Yard, Philadelphia, \$650,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel and concrete. Owners taking bids, due August 29th at 11 A. M. F. W. Mark Cont. Co., Finance Building; W. W. Anstine Co., 1218 Filbert street; Cramp & Co., Denckla Building; Thos. Reilly, 1616 Thompson street; J. S. Rogers Co., Drexel Building; H. M. McCloskey, Jr., 1620 Thompson street; Wm. R. Dougherty, 1610 Sanson street; Melody & Keating, 1322 Race street, and Geo. F. Pawling Co., 1432 South Penn Square, Philadelphia, additional bidders.

Emergency Hospital Buildings, Naval Hospital Reservation, Philadelphia, Spec. 3297, \$355,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Owners taking bids, due August 29th at 11 A. M. Thos. C. Trafford, 1613 Sanson street; F. W. Mark Cont. Co., Finance Building; Warren-Moore Co., Colonial Trust Building; W. W. Anstine Co., 1218 Filbert street; Cramp & Co., Denckla Building; Thos. Reilly, 1616 Thompson street; J. S. Rogers Co., Drexel Building; M. H. McCloskey, Jr., 1620 Thompson street; Wm. R. Dougherty, 1610 Sanson street; Melody & Keating, 1322 Race street, and Geo. F. Pawling Co., 1432 South Penn Square, are figuring.

Residence (alts.) to Apartments, 1227 North Broad street, Philadelphia. Architect, Henry L. Reinhold, Jr., 1309 Walnut street, Philadelphia. Owner's name withheld. Brick, 4 stories, 40x100 feet, slag roof, vapor vacuum heating, electric lighting, tile work, painting, glazing, plumbing, plastering, hollow metal skylights, fire tower. Architect is ready for sub-bids on all lines.

Residences (2 pairs twins), Foulkrod and Duffield streets, Philadelphia. Architects, Laechman & Murphy, Drexel Building, Philadelphia. Owner, Geo. S. Wardle, 5108 Duffield street, Philadelphia. Brick, 3 stories, 16x50 feet, slate roof, hot water heating, electric lighting, tile and marble work. Owner is taking bids.

Garage, northeast corner of Twenty-third and South streets, Philadelphia. Architect, private plans. Owner, Edw. M. Harris, 3214 Chestnut street, Philadelphia. Reinforced concrete and brick. Too early for details. Preliminary plans in progress.

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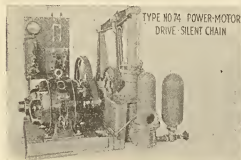
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Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man
and Interior and Exterior Fitter.

Bank Building (add.), Broad and Erie avenue, Philadelphia. Architect, Philip Merz, Pennsylvania Building, Philadelphia. Owner, North Philadelphia Trust Company, on premises. Brick and limestone, 3 stories, 20x110 feet, concrete and slag roof, steam heating, electric lighting, cement floors, hollow tile, metal lath. Contract awarded to A. R. Raff Construction Co., 1635 Thompson street, Philadelphia.

Warehouse, 531-37 North Fourth street and 528-32 North Orianna street, Philadelphia. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care Architect. Brick (slow burning brick construction), 1 story and basement, 60x178 feet, slag roof, pine floors, electric lighting. Contract awarded to Raith Construction Co., 304 Master street, Philadelphia.

Garage (add.), 2042 North Van Pelt street, Philadelphia, \$1250. Architect, Private plans. Owners, Jacob Reed & Sons, 1424 Chestnut street, Philadelphia. Brick, 1 story, 8x8 feet, cement floor, slag roof. Contract awarded to C. W. McDowell Agency, 2118 Diamond street, Philadelphia.

Garage, Bustleton Pike and Castor Road, \$1200. Architect, private plans. Owner, A. F. O'Neill, 2454 Kensington avenue, Philadelphia. Frame, 1 story, 30x60 feet, 14 feet high. Contract awarded to D. W. O'Dea, 5227 North Fifth street, Philadelphia.

South Philadelphia Yard, near Greenwich Point, Philadelphia. Architect, A. C. Shand, Broad Street Station, Philadelphia. Owner, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, steel and concrete, concrete foundations, slag roof, steam heating, electric lighting, cement floors, metal lath, elevators, roof ventilators, rolling steel doors, hollow metal doors, Engine House, Machine Shop, Ash Pit, Oil Houses, etc. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

Manufacturing Building, Tacony and Van Kirk streets, Philadelphia, \$5000. Architect, private plans. Owners, Super Glass Co., 3400 Disston street, Philadelphia. Brick and steel, 1 story, 27x37 feet, stone foundations, asbestos roof. Contract awarded to Walter R. Potts & Bros., 1026 Wood street, Philadelphia.

Residence and Garage, Lincoln Drive and Carpenter street, \$42,000. Architects, Druckemiller & Williams, 1527 Chestnut street. Owner, Dr. B. R. Simon, Eighth and Market streets, Philadelphia. Stone, stucco and brick, 2 stories, 32x60 feet, wing 34x18 feet and 2 stories 25x35 feet, slate roof, hot water or vapor heating, electric lighting, hardwood and cement floors, tile work. Contract awarded to W. John Stevens, Inc., Wynrofe, Pa.

Residence and Garage, southwest corner Seventeenth and De Lancey Place, Philadelphia. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owner, Mrs. J. E. Beatty on premises. Brick and stone, 3 stories, fireproofing, stone foundations, tin roof, cement hardwood, composition and cork floors, hot water heating, electric lighting, tile work, metal lath, metal window guards, ornamental iron work. Contract awarded to Jos. Ashby, Second Street Pike, Philadelphia.

Stable (alts.) to Garage, 4806 Wayne avenue, Philadelphia, \$9000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Angelo Pasquarello on premises. Stone and brick, 1 story, changing stable 60x60 feet to garage 60x120 feet, slag roof, cement floors, electric lighting, hollow metal skylights, roof ventilators, gasoline storage system. Contract awarded to John Roman, 4521 Pulaski avenue, Philadelphia.

Store Building (alts.), 1816 Market street, Philadelphia, \$1700. Architects, Henon & Boyle, 10 South Eighteenth street, Philadelphia. Owners, estate of D. B. Fuller, 10 South Eighteenth street, Philadelphia. General interior alterations, iron work, carpentry, ce-

ment and concrete work, mill work, hardware, steam heating, electric wiring, painting and plumbing. Contract awarded to Bernard J. McKenna, 1927 West Somerset street, Philadelphia. School (alts.), Fifteenth and Race streets, Philadelphia. Architect, private plans. Owners, Friends' Select School, Fifteenth and Race streets, Philadelphia. Partitions of glass, plastering and trim. Contract awarded to H. H. Burrell, 206 South Quince street, Philadelphia.

Factory (add.), Swanson and Rinker streets, Philadelphia, \$25,000. Architect, private plans. Owner, Chas. Eben Johnson, 509 S. Tenth street, Philadelphia. Brick and reinforced concrete, 1 story, 60x140 feet, slag on concrete roof, concrete foundations and floors, steam heating, electric lighting, rolled steel sash, fire doors. Contract awarded to Franklin Engineering Co., Bulletin Building, Philadelphia.

Store House, Office and Oil House, Third and Erie avenue, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Reinforced concrete, brick and terra cotta coping, 1 and 2 stories, 66x83 feet and 26x44 feet, asbestos and slate roof, concrete, granolithic, pine and maple floors, steam heat, electric light, rolled steel sash, copper skylights, fire and Almetta doors, iron stairs, ornamental iron work, metal lath, wire work, elevators. Contract awarded to Pringle Borthwick, 8018 Germantown avenue, Philadelphia.

Engine Room, Margaret and Worth streets, Philadelphia, \$12,000. Architect, private plans. Owners, Schwartz Wheel Co., on premises. Brick and steel, stone foundations, 1 story, 30x80 feet, slag roof, cement floor. Contract awarded to P. M. Sax, Franklin Bank Building, Philadelphia.

Storage Shed, foot of Morris street, Delaware River, Philadelphia. Architect, George I. Lovatt, 416 Walnut street, Philadelphia. Owners, Baugh & Sons Co., 20 South Delaware avenue, Philadelphia. Frame, 1 story, 100x300 feet, concrete foundations, concrete floors, electric wiring, electric tramway. Contract awarded to C. T. Stockhausen, Baltimore, Md.

Garage, 1328-30-32 South Ninth street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, Frank R. Dillea, southeast corner of Seventh and Christian streets. Brick, 2 stories, 46x83

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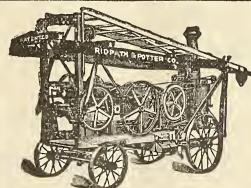
1629 Ludlow Street
Philadelphia, Pa.

feet, slag roof, stone foundations, steam heating, electric lighting, hollow metal skylights, structural iron work, cement floors, gasoline storage system, 1 elevator. Contract awarded to Dominic Ioro, 519 Christian street, Philadelphia.

Store and Apartments (alts.) and Garage, 7232-34 Woodland avenue. Architect, I. W. Levin, 2434 South Eighth street, Philadelphia. Owner, I. Matuk, 7324 Woodland avenue, Philadelphia. Brick, 3 stories, 40x30 feet; garage, 1 story, 10x20 feet, slag roof, pine floor, cement work, mill work, hot water heat, electric light, tile work, flush bulks, metal lath, ornamental iron work. Contract awarded to Mr. Wozgman, care of owner.

Office Building, Frankford, Philadelphia, \$50,000. Architect, Wm. C. Pritchett, 416 Walnut street, Philadelphia. Owners, Barrett Manufacturing Co., Frankford, Philadelphia. Brick and reinforced concrete, 4 stories, 60x50 feet, slag roof, wood floors, electric lighting. Contract awarded to Turner Concrete Steel Co., 1713 Sansom street, Philadelphia.

Manufacturing Buildings (5) (Fire Repairs),



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Twenty-second and Allegheny avenue, Philadelphia, \$15,000. Architect, private plans. Owners, Westmoreland Chemical and Color Co., 925 Chestnut street. General restoration to former condition, steel work, asbestos and slag roof, brick work, plank floors (heating, electric work and plumbing reserved). Contract awarded to Rush J. Whiteside & Sons Co., 2115 Wallace street, Philadelphia.

cement floors. O'Rourke & Fehr, Reading, Pa., received contract.

Washing Machine (ext. and alt.), Maple street, Reading, Pa., \$8000. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owner, J. H. Knoll, Reading, Pa. Three stories, 50x72 feet, Carey roof, concrete foundations, mill construction, stucco work. Contract awarded to Frank Fisher, Reading, Pa.

Residences (1,149), Pembroke Village, Bethlehem, Pa. Architects, Zantinger, Borie & Medary, Otis Building, Philadelphia. Owners, U. S. Government, Department of Labor, Bureau of Industrial Housing and Transportation, Washington, D. C. Engineer, L. J. H. Grossart, Bethlehem, Pa. Town Planner, Thos. W. Sears, 1424 Walnut street, Philadelphia. Brick, concrete blocks and brick, 2½ stories, various sizes and styles, 22x24 feet to 17x30 feet, slate, composition or slag roofs, cement and hemlock floors, hot air heating, electric lighting, concrete foundations. Contract awarded to C. Whitney Co., 101 Park avenue, New York City.

Engine House and Power House, Saucon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Twelfth and Market streets, Philadelphia. Brick, reinforced concrete, terra cotta coping, 1 story, 77x36 feet, 100x200 feet; Coal Pocket, 11x34 feet; Machine Shop, 11x20 feet; Fan House, Locker House and Wash House and Toilet and Lunch Rooms, 27x56 feet, asbestos roof, cement, asphalt, mastic paving floors, slate partitions, concrete foundations, rolled steel sash, waterproofing, roof ventilators, metal lath (6 stalls). Contract awarded to Rordhouse-Arey Co., 112 North Broad street, Philadelphia.

Bridge, Brookhaven, Delaware County, Pa., \$19,800. Engineers, W. A. Courtenay, Jr., Marcus Hook, Pa., and Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owners, County Commissioners, County Controller, Media County Court House, Media, Pa. Reinforced concrete, 30x56 feet, metal lath, iron railings. Contract awarded to Whitaker & Diehl, Harrisburg, Pa.

Advertising is nothing more nor less than good salesmanship reduced to print. The business man who can put "sales talk" into type has learned the cardinal principle of good advertising.

PENNSYLVANIA Construction News

Garage and Meeting House, Tenth and Penn streets, Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owner, Geo. Cones, 844 Penn street, Reading, Pa. Brick and steel, 2 stories, 134x24 feet, tin roof, stone foundations, hot water heating, electric lighting, pine and concrete floors. Plans in progress.

Residence and Store, Minor and Willow streets, Reading, Pa. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owner, H. J. Roudenback, Chestnut street and Perkinson avenue, Reading, Pa. Brick, 3 stories, 17x72 feet, tin roof, stone foundations, hot water heating, electric lighting, hardwood floors. Plans in progress.

Factory, Reading, Pa. Architect, A. A. Ritcher, Sixth and Court streets, Reading, Pa. Owner, Gehrke Knitting Mills, Reading, Pa. Brick, 1 story and basement, 100x35 feet, slag roof, stone foundations, cement floors, electric lighting, steel sash. Architect taking bids due August 26.

Automobile Show Room and Store Building, Fourth and Edgemont streets, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Penn Realty Corp., Chester, Pa. Stone and brick, 1 story and basement, 84x35 feet, concrete foundations, Carey and tin roof, cement and tile floors, tile and marble work, hollow metal skylights, metal bulks (heating, electric work and painting reserved). Owners taking bids. E. H. Scroggins, Chester, Pa., additional bidder.

Newspaper Building (alt.), Norristown, Pa. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owner, Times Publishing Co., Norristown, Pa. New windows, new

partitions, general repairs. Plans about completed. Architect will soon take bids.

Cottages (2), Indian Creek and B. & O. R. R., Fayette County, Pa. Architects, King & Wightman, 1513 Walnut street, Philadelphia. Owners, Mountain Water Supply Co., Commercial Trust Building, Philadelphia. Frame, clapboard and shingle, 2½ stories and basement, 26x30 feet, slate roof, pine floors, hot water heating, electric lighting, plumbing. Owners will build.

Residence (alts.), Woodmont, Pa. Architect, private plans. Owner, Prof. Thomas Nolan, University of Pennsylvania, Philadelphia. Stone, 2½ stories, 25x60 feet, shingle roof (raising roof to put in additional story), 2 baths, electric wiring, hardwood floors and general interior alterations. Plans in progress.

Machine Shop, Stony Creek, Pa. Engineer, Maintenance of Way Department, Room 361, Broad Street Station, Philadelphia. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, hollow tile and steel, 1 story, 83x82 feet. Plans in progress. Too early for details.

Pennsylvania Contracts Awarded

Engine House (alt. and add.), Tenth and Mulhberg streets, Reading, Pa., \$8000. Architect, W. A. Fink, 426 Franklin street, Reading, Pa. Owner, City of Reading, Court House, Reading, Pa. Steel construction, first floor,

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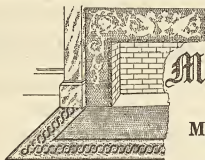
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NEW JERSEY Construction News

Manufacturing Building (alts. and add.), Federal street, Camden, N. J., \$20,000. Architect, H. P. Friend, Arcade Building, Norristown, Pa. Owners, Dobbins Soap Mfg. Co., Federal street, Camden, N. J. Changing building for production of glycerine, general alterations and addition, new partitions, etc. Plans in progress. Architect will take bids in about two weeks.

Church and Sunday School and Parsonage, Trenton, N. J. Architect, Chas. Bolton & Sons, Witherspoon Building, Philadelphia. Owner, Pilgrim Pres. Church, care Rev. M. Hughes, Trenton, N. J. Brick and stone, 1 and 3 stories, size undecided, slate roof, hardwood floors, steam heat, electric light. Plans in progress.

Barracks, Camden, N. J. Architect, private plans. Owners, United States Government, care New York Shipbuilding Co., Camden, N. J. Frame, 1 story (accommodations for 100 men), ready roof, pine floors, concrete foundations. Plans completed.

School (alts. and add.), Rumemede, Camden County, N. J., \$9,000. Architect, Thos. Stephens, Temple Building, Camden, N. J. Owners, Board of Education, Centre Township, Camden County, N. J. Brick, 1 story, 30x66 feet, slate roof, stone foundations, steam heating, pine floors, roof ventilators. Owners have received bids.

Repairing Shop, Newton avenue, Camden, N. J. Architect, private plans. Owners, Public Service Co. of Camden, care of Mr. Wm. Bidwell, Newark, N. J. Brick, 1 story, 70x130 feet, slag roof, concrete foundations, concrete floors, roof ventilators. Owners taking bids, due August 24th. Mockett Const. Co., Sixth and Market streets; Wm. Wrixford, 525 Market street; Wm. Draper, 439 Haddon avenue, and Geo. H. Bachman, 19 North Thirtieth street, all of Camden, N. J., are figuring. Consists also of structural iron work, cement work, skylights.

School Building, Yorkship Village, N. J., \$250,000. Architect, Electus D. Litchfield, 477 Fifth avenue, New York City. Owners, U. S. Government, care of Fairview Realty Co., Yorkship Village, N. J. Engineers, Lockwood, Greene & Co., 101 Park avenue, New York City. Work contemplated.

Community Centre, Gloucester, N. J. Architects, Bissell & Sinkler, Otis Building, Philadelphia. Owners, U. S. Government, E. F. C., care of L. D. Kohn, Chief Prod. Dept., 1421 Cherry street, and Pusey & Jones, Wilmington, Del. Consists of School, Stores, Moving Picture Theatre, Apartments, Fire Engine House, etc. Plans in progress.

Naval Air Station, Spec. 3142, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, 1317 F street, Washington, D. C. Frame, reinforced concrete, concrete foundations, ready roof, wood and cement floors, steam heat, electric lighting, metal lath, roof ventilators, damp-proofing, plasterboard. Officers' Quarters, Barracks, Mess and Recreation Hall, Guard House, Laboratory and Compressor Building, Oil Storage and Reclaiming Building, Wing Depot, Paint and Carpenter Shop, Dirigible Storehouse and Fabric Shop, Blacksmith Shop, Blower Houses, etc. Lowest bidders: Frymer & Hanna Co., 25 West Forty-fifth street, New York City.

Engine House (add.), Phillipsburg, N. J. Architect, Maintenance of Way Department, Room 361, Broad Street Station, Philadelphia. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, steel and concrete, 1 story, 27x30 feet. Plans in progress.

New Jersey Contracts Awarded

Extension to Factory, Delaware avenue and Pearl streets, Camden, N. J. Architect, private plans. Owners, Concrete steel Co. on premises. Timber and corrugated iron, 1 story addition 52x122 feet, prepared roofing, concrete foundations, pine floors. Contract awarded to Lam Building Co., 1001 Wood street, Philadelphia.

B-2 Foundry and Core Room Bldg. (alts.), Newark, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Essex Foundry Co., Newark, N. J. Brick and steel and concrete, raising

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roof, etc. Contract awarded to Estieco Bros., 40 Clinton street, Newark, N. J.

Drying Furnace, Fifth and Highland sts., Camden, N. J. Architect, private plans. Owner, American Steel Foundry on premises. Structural steel, fire brick and concrete, 20x20 feet, fire brick roof, concrete foundations, concrete floors, electric lighting. Contract awarded to R. Scroggins, Chester, Pa.

School (alts.), Ocean City, N. J., \$6,000. Architect, Hudson Vaughn, Guarantee Trust Building, Atlantic City, N. J. Owners, Ocean City School Board, care of J. R. Groves, President, Ocean City. General interior alterations. Contract awarded to Wesley B. Poreh, Sheen Building, Atlantic City, N. J.

Cottage, corner Cornwall and Ventnor sts., Ventnor, N. J. Architect, private plans. Owner, A. Marston, Cornwall and Ventnor streets, Ventnor. Brick, 3 stories, 30x60 feet, slate roof, concrete foundations, hot water heat, electric light, tile and marble work, hardwood floors. Contract awarded to Wesley B. Poreh, Sheen Building, Atlantic City, N. J.

School, Absecon Highlands, N. J., \$3,500. Architect, S. Hudson Vaughn, Guarantee Trust Building, Atlantic City, N. J. Owners, Galloway Township Board, care of Edw. S. Johnson, Clerk. Brick, 1 story, 24x60 feet, slate roof, stone foundations. Contract awarded to Jos. Stellman, Fort Republic, N. J.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

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Miscellaneous Construction News

Housing Colony, New Castle, Del., \$550,000. Architect, Chas. C. May, 15 East 40th street, New York City. Owners, Bethlehem Steel Co., Bethlehem, Pa. Engineers, Robinson & Wagner, 37 East 28th street, New York City. Landscape architect, Geo. F. Pentecost, Jr., 15 East 40th street, New York City. Frame, 2 stories, 5 and 6 room cottages, dormitories (2) to accommodate 100 people, (2) for 75, and (2) for 50, (14) convertible houses, power house, dining hall, recreation building, prepared roofing and asbestos shingle roof, steam and hot air heating. Owners are taking bids. Realty Construction Co., Eleventh and Orange streets, Wilmington, Del., is figuring.

Extension to Boiler Plant, Navy Yard, Washington, D. C., Spec. 3244, \$160,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Brick, steel and reinforced concrete, 109x33 feet, 68 feet high, slate and slag roof, concrete piles, electrical wiring, concrete floors, waterproofing, dampproofing. Owners taking bids due August 26 at 11 A. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Naval Training Camp, Coddington Point, Newport, R. I., Spec. 3249, \$4,200,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Regimental Quartermasters Building, Drill Hall, Mess Hall, Guards' Quarters, Regimental Office, Brigade Headquarters Office Building, Dispensaries, Isolation Building, Swimming Pool, etc. Brick, reinforced concrete, hollow tile, ready, shingle and canvas roof, concrete, asphalt, mastic and yellow pine floors, metal lath, galvanized steel skylights, roof ventilators, waterproofing. Owners taking bids due August 26 at 11 A. M. F. W. Mark Construction Co., Finance Building, additional bidder.

Church, Detroit, Mich. Architects, Chas. W. Bolton & Son, Witherspoon Building, Philadelphia. Owner, Trinity Reformed Church of Detroit, care Rev. F. W. Ball, 173 Glenmore avenue, Detroit, Mich. Brick and hollow tile, 1 story, 50x75 feet, slate roof, hardwood floors, steam heating, electric lighting. Plans completed. Architects ready for bids.

Factory, S. S. Hunters Point avenue between Vandann and School streets, New York. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Patterson-Sargent Co., New York City. Brick, steel and concrete. Architects are sub-letting all contracts.

Residence, 1804 West Sixth street, Wilmington, Del., \$3000. Architect, private plans. Owner, Guido Mangino, 514 Union street, Wilmington, Del. Brick, 2 stories, 15x42 feet, slag roof, stone foundations, hot air heating, electric lighting. Contract awarded to S. Tabasso, 1912 North Ninth street, Wilmington, Del.

Residence and Store (alts.), 106 West Sixth street, Wilmington, Del., \$1000. Architect, private plans. Owner, Edw. Reynolds & Son, 106 West Sixth street, Wilmington, Del. Brick, flush bulk, new partitions. Contract awarded to Harry S. Lynch, 715 Tattall st., Wilmington, Del.

Residence (alt.), 1413 Van Buren street, Wilmington, Del., \$1500. Architect, private plans. Owner, Ralph Derr 1413 Van Buren street, Wilmington, Del. General alterations and repairs. Contract awarded to Chas. Tindall & Son, 614 Tattall street, Wilmington, Del.

Fuel Oil Storage Plant and Equipment, Spec. 3269, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Boiler House, 3 stories, 63x47 feet, steel frame, concrete floor, slag roof, metal lath, steel sash, metal covered doors, ventilators; Heater House, frame, galvanized sheet steel roofing and siding, mechanical and electrical equipment, piping, etc. Owners taking bids, due September 9th at 11 A. M. F. W. Mark Cont. Co., Finance Building, Philadelphia, is figuring.

Steel Storage Shed, Spec. 3228, Norfolk, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and cement, 1 story, 330x600x50 feet, composition asbestos and slag roof, metal lath, steel sash. Lowest bidder, Austin Co., Washington, D. C.

Steel Storage Shed, Spec. 3228, Norfolk, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and cement, 1 story, 330x600x50 feet, composition asbestos and slag roof, metal lath, steel sash. Lowest bidder, Austin Co., Washington, D. C.

Library, Fifty-first and Chester avenue, Philadelphia, \$82,000. (O), Free Library of Philadelphia, Thirteenth and Locust streets, Philadelphia. (C), Frank G. Stewart, 1619 Sansom street, Philadelphia. Brick, 1 story, T-shaped, 94x38 feet, 44x13 feet, 38x32 feet, concrete foundations, steam heating, slate roof, stone, brick, and terra cotta front.

Office Building, Morris and Bamberg streets, Philadelphia, \$15,000. (O and C), Lutz Co., Inc., Thirty-first and Grays Ferry Road, Philadelphia. Brick, 3 stories and basement, 40x35 feet, slag roof, steam heating, stone foundations.

Houses (56), Shields street and North Buist avenue, Philadelphia, \$91,000. (O and C), Alexander Ferguson, 5501 Willow avenue, Philadelphia. Brick, 2 stories, 16x32 feet, slag roof, hot water heating.

Dwellings (27), Shields street and North Buist avenue, Philadelphia, \$3,150. Brick, 2 stories, 15x32 feet, slag roof, hot water heating.

Dwellings (10), S. S. Elmwood avenue, West Sixty-sixth street, Philadelphia, \$45,000. Brick, 2 stories, 16x25 feet, slag roof, hot water heating.

Dwelling and Store, southwest corner Sixty-sixth and Elmwood avenue, Philadelphia, \$5000. Brick, 1 story, 16x39 feet, 2 and 3 stories, 16x31 feet, slag roof, hot water heating.

Dwelling, southeast corner Elmwood avenue and Shield street, Philadelphia, \$5000. Brick, 2 stories, 17x39 feet, slag roof, hot water heating.

Dwelling, Sixty-sixth and Buist avenue, Philadelphia, \$4500. Brick, 16x39 feet, stone foundations, slag roof, hot water heating.

Dwellings (25), west side of Sixty-sixth and Buist avenue, Philadelphia, \$100,000. Brick, 16x25 feet, 2 stories, slag roof, hot water heating.

Garage, west side of Sixty-sixth street, south of Elmwood avenue, Philadelphia, \$300. Brick, 1 story, 16x10 feet, stone foundations, cement roof.

Garage, 6644 Lincoln Drive, Philadelphia, \$1200. (O), J. L. Christian on premises. (C), N. H. DeRenzo, Twenty-first and Godfrey sts., Philadelphia. Stone, 1 story, 23x23 feet, slate roof, metal lath.

Garage, Medar and Park avenue, Philadelphia, \$900. (O), John Goldman on premises. (C), Edward B. McCall, Sixty-fifth and Park avenue, Philadelphia. Stone, 1 story, 20x30 feet, slate roof, cement floor, stone foundations.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

Advertising is telling you who you are, where you are, and what you have to offer the world in the way of service or commodity.

If nobody knows who you are, or what you have to offer, you do no business, and the world is the loser through giving you absent treatment.

Life is too short for the consumer to employ detectives to ferret out merchants who have the necessities of life to sell.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 819 Levick street, \$1000. (O), W. T. McCreavy on premises. (C), H. Fenton, 7000 Rising Sun Lane. Brick, 20x30 feet, concrete fds., slate, slate roof, cement floors, steel sash windows.

Garage, 4411 North Ninth street, \$950. (O), Harry A. Cooper on premises. (C), Thomas N. Keely, 441 Germantown avenue. Brick, 1 story, stone foundations, slag roof, 16x20 feet.

Garage, Bustleton Pike and Castor Road, \$1200. (O), A. F. O'Neill, 2454 Kensington avenue. (C), D. W. O'Dea, 5227 North Fifth street. Frame, 1 story, 3600x16x14 feet.

Dwelling, Lincoln Drive and Carpenter st., \$87,000. (O), B. Richard Simon, Tenth and Market streets. (C), W. John Stevens, Inc., Wynecote, Pa.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.

DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Residence, 4153 North Seventh street, \$500. (O), Fred C. Luker on premises. (C), F. L. Hoover & Sons, 1023 Cherry street. Repair fire damages.

School, Chestnut and Norwood avenues, Chestnut Hill, \$400. (O), M. Chapman on premises. (C), Alex Call, 48 East Chestnut avenue, Chestnut Hill, Pa. Alterations.

Residence, 5344 Magnolia avenue, \$400. (O), Jos. P. David on premises. (C), Makin-Kelsey Heating Co., 1827 Filbert street. Warm air heating.

Residence, Cheltenham avenue and Seventieth streets, \$400. (O), H. C. Ashbury, 7th and City Line. (C), Makin-Kelsey Heating Co., 1827 Filbert street, Philade. & VWPg., sh 1827 Filbert street. Warm air heating.

Store Building, 1015 arket street, \$8000. Architect, Hoffman Co., Finance Building, (O), Finance Co., Finance Building. (C), Ketcham & McQuade, 1029 Brown street. New bulk windows, alterations.

Tank Supports, Frankford avenue and Pennsylvania Railroad, \$300. (O), Hulton Dyeing Co., 3819 Frankford avenue. (C), F. Crompton & Bro., 4614 Oakland street. Tank supports.

Store and Dwelling, 1213-15 East Cheltenham avenue, \$3300. (O), S. Goldfarb, 1201 East Cheltenham avenue. (C), Davis-Clayton, 1817-19 North Twentieth street. New bulks and alterations.

Garages and Tool Room, Warneck and Locust streets, \$800. (O and C), Mundy Paving Company, 228 South Alder street. Brick, 1 story, 48x46 feet.

Dwelling, State Road and Arundel avenue, \$1000. (O), Thomas Davenport on premises. (C), A. W. Corney, 5701 Leonard street. Frame, 1 story, 15x267 feet, slag roof, stone foundations.

Dwelling, 1413 West Alleghany avenue, \$1350. (O), B. Slough, 703 West Cumberland street. (C), Wm. J. Baltz, 709 West Butler street. Brick. Alterations.

Residence, 5822 Haverford avenue, \$400. (O), Edwin L. Johnson on premises. (C), Makin-Kelsey Co., 1827 Filbert street. Warm air heating.

Dwelling, 1430 South Thirteenth street, \$350. (O), S. Salario on premises. (C), A. De Mario, 1224 Christian street. Brick, 1 story, 11x16 feet, slag roof, stone foundations.

Shed, Thirty-fifth and Grays Ferry Road. (O and C), A. J. Clark on premises. Shed, 1 story, 45x60 feet.

School, Fifteenth and Race streets, \$800. (O), Society of Friends, Fifteenth and Race streets. (C), H. H. Burrell, 206 South Quince street. Brick alterations.

Dwelling, 1801 North Park avenue, \$900. (O and C), S. S. Kirk, 1733 North Twelfth street. Alterations.

Storehouse, 449 North Second street, \$350. (O), Penna. C. 519 Chestnut street. (C), John Duncan, 920 Walnut street. Repair fire damages.

Synagogue, Sixth and Wharton streets, \$675. (O), Jos. Feldman, Trustee, 607 Tasker street. (C), F. Meyer, 734 Bainbridge street. Brick alterations.

Dwelling, 750 S. Second street, \$6500. (O), Dr. Louis Blumberg, 735 South Fifty-second street. (C), Frank Lucci, 1603 Ellsworth

street. Brick, 3 stories, 16x65 feet, slag roof, hot water heating, metal cornices, stone foundations.

Garage, Callowhill street west of Twenty-sixth, \$600. (O), Penna. Door and Sash Company, Twenty-fifth and Callowhill street. (C), H. F. Dinkelacker, 227 North Parson street. Brick, 1 story, 16x30 feet.

Stores and Offices, 277 South Eleventh st. (O), Henry LaBarre Jayne, Eleventh and Spruce streets. (C), Wm. B. Bryan, 278 S. American street. Brick alterations.

Store Room, 4010-12 Chestnut street, \$500. (O), Emanuel Barrick on premises. (C), A. H. D. Douglass, 330 North Sixty-third street. Iron on iron, 1 story, x feet, slag roof.

Dwelling, 127 East Cliveden avenue, \$450. (O), Wm. F. Elkington, 127 East Cliveden avenue. (C), James Spear Heating Company, 1823 Market street. New heater.

Wall, 1023 Market street, \$350. (O), Hare Estate, 213 Franklin Building. (C), J. F. Harris, 1502 Webster street. Brick alterations.

Garage, 2042-44-46 North Van Pelt street, \$1250. (O), Jacob Reed's Sons, 1426 Chestnut street. Brick, 1 story, 8x8 feet, cement floor, tin roof.

Dye Works, Main street and Walnut Lane, \$400. (O), G. J. Littlewood on premises. (C), E. L. Cuthbertson, 354 Roxboro street.

Garage, 4908 Wayne avenue, \$8500. (O and C), A. Pasquarello, 4906 Wayne avenue. Brick, 64x59 feet, concrete roof, slag roof.

Store and Dwelling, Sixtieth and Walnut streets, \$3150. (O), M. Cohen, Sixtieth and Walnut street. (C), M. Kirschner, 421 Snyder avenue. Alterations.

Store Building, 1518 Market street, \$900. (O), H. M. Chance on premises. (C), Basch & Company, 1426 South Front street. Flush bulks, marble work.

Store and Offices, 104 South Fifty-second street, \$2200. (O), Henry Felt, Locust Street Theatre. (C), Geo. M. Crowl, 5510 Wyalusing avenue. Brick, 1 story, 7x21 feet, alterations.

Building, Howard and Huntingdon street, \$350. (O), John Hamilton & Sons, 2715 Huntingdon street. (C), Stewart Brothers, 2546 North Orkney street. Arch supports.

Booming House, 1711 Arch street, \$1000.

Mrs. Sarah McRidden, care J. Stanton Witherspoon Building. (C), C. Brownworth & Co., 1611 Sansom street. Wire glass, fire escapes.

Dairy, Sixteenth and Tasker streets, \$500. (O), Henry Dolfinger, Sixteenth and Tasker streets. (C), Wm. R. Dougherty, 1610 Sansom street. Tank supports.

Garage, Devereaux S. Kensington avenue, \$400. (O), Carl Kraemer on premises. (C), Charles Sinn, 211 Clarkson avenue. Brick, 1 story, 14x16 feet, slag roof, stone foundations.

Store, Rising Sun avenue and Devereaux streets, \$1200. (O), Carl Krautter on premises. (C), Charles Sinn, 211 Clarkson avenue. Stone foundations, brick, 1 story, 16x19 feet, slag roof.

Dwelling, 1930 East Lehigh avenue, \$700. (O) Mrs. M. Hancy on premises. (C), Wm. F. Steinbach, 949 East Westmoreland street. New brown stone front.

Dwelling, 1928 East Lehigh avenue, \$700. (O), Mrs. A. Kneibls, 1928 East Lehigh ave-

nue. (C), Wm. F. Steinbach, 949 East Westmoreland street. New brown stone front. Boiler House, Emerald and Huntingdon streets, \$360. (O), John Greenwood & Sons, on premises. (C), Geo. Kennington, 2435 N. Hope street. Brick, 1 story, 38x45 feet, stone foundations.

Convent, 5323-34 Vine street, \$750. (O), Archbishop Dougherty, Eighteenth and Race streets. (C), John McShain, 1610 North st. Brick passageway, tin roof. Manufacturing Building, Tacony and Van Kirk streets, \$5000. (O), Super Glass Co., 3400 Diston street. (C), Walter R. Potts & sons, 1026 Wood street. Brick, 1 story, 27x37 feet, stone foundations.

CORRECT LIGHTING OF SCHOOL BUILDINGS.

(Continued from Page 476.)

and when of low transmission, the effect approaches that of indirect lighting.

An indirect system is known as one in which all or practically all the light reaches the work plane indirectly after reflection from the ceiling and walls. The necessary is usually an opaque or slightly translucent inverted bowl or shade containing a reflecting medium.

All three of these systems of lighting are in successful use in schools. There has been a growing preference for semi-indirect and indirect lighting, especially since the introduction of modern lamps of great brilliancy. Local lighting by lamps placed close to the work is unsatisfactory except for special cases such as the lighting of blackboards, maps, charts, etc.

Except in very rare instances bare light sources should not be exposed to view. They should always be adequately shaded. Even when shaded by translucent media, such as dense glassware, the lighting units should be placed well out of the ordinary range of vision; in other words it is recommended that lighting units be of low brightness, even if they are located high in the field of view.

Glossy surfaces of paper, woodwork, desks, walls and blackboards are likely to cause eye-strain because of specular or mirror-like reflection of images of light sources, especially when artificial light is used. Matte or dull finished surfaces are recommended. It is to be noted that a high reflection factor does not necessarily imply a polished or glazed surface.

The chief factors which must be considered in arriving at the size and number of lamps to be used in a given room are (1) the floor area; (2) the total luminous flux emitted per lamp, and (3) coefficient of utilization of the particular system considered. The first should be measured in square feet. The second may be obtained from a data book supplied by the manufacturers of lamps. The third involves many factors such as the relative dimensions of the room, the reflection factor of the surrounding, the number of lighting units and their mounting height, and the system of lighting. By coefficient of utilization is meant the proportion of the total light flux emitted

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.**

by the lamps which is effective on the work plane.

Suitable switching and controlling arrangements should be made to permit of lighting one or more lamps independently as conditions may require.

The teacher's desk may be illuminated by one of the overhead lighting units, or if necessary, by a desk lamp.

With the usual lighting equipments the distance between the units should not exceed one and one-half times the height of the apparent source of illumination above the work-

ing level.

Blackboards should be of minimum size practicable and should not be placed between windows. Their position should be carefully determined so as to eliminate the glare due to specular reflection of images of either artificial or natural light sources directly into the eyes of occupants of the room.

Glare due to specular reflection from blackboards may be reduced or eliminated by lighting them by means of properly placed and well shaded local artificial light sources.—“National Builder.”

at Eddystone, by speculators merely, to build bunk houses for the extra workmen. This was stopped by the State Bureau of Housing, as it would have resulted in most insanitary living conditions.

Most of our beautiful suburbs are safeguarded by building restrictions, so that a man may own his home without fear that it will be depreciated in value by the building mistakes of his neighbors. Why not put the thrifty working man in the same position instead of permitting the greed of an ignorant neighbor to build a lower type of building in the same neighborhood?

Every individual home, with its well-arranged grounds, has become a powerful part of the broad city planning movement. It has been demonstrated that good surroundings pay in the better residence property. Will the housing problem ever be successfully solved until more consideration is given to the creation and permanent safeguarding of neighborhoods of considerable area for the man who earns a low wage?

Size of House and Health.

Some thirty years ago, the first thoroughly systematic attempt was made by Dr. Russell in Glasgow to show a definite relation between the size of the house and the health of the occupants. These studies, which applied extensively in Glasgow and to a certain extent statistically in eight Scottish cities, established the fact that the death rate in one-room dwellings was higher than in two-room dwellings; in two-room dwellings than in three-room dwellings; in three-room dwellings than in those of four rooms.

The factor of living room stood out independent of location or surroundings of dwellings. If is true, however, that insanitary conditions were almost synonymous with small dwellings.

Relatively the same proportionate death rates may be proven in any large municipality, and since Russell's day numerous studies have been made along similar lines by health authorities, all tending to corroborate the original figures.

Back of the housing problem with its evil effect upon health and morals are traditions which have to be dispelled before we can succeed in accomplishing any great reform. Moreover, we must develop in each community a housing conscience. Drastic enforcement without heed of results might readily dispossess many individuals now housed in unsanitary places, thus forcing them to drift into other equally unsanitary places. Educational work should always precede decided executive work and should necessarily be the strong arm in reform. Rigid enforcement of the requirements of the law, however, could be used to prevent the creation of an evil in communities not yet so infested.

In America to-day we are passing through the elementary stage of preventive medicine

HOUSING IN RELATION TO HEALTH

By John Molitor,

Chief Bureau of Housing, Department of Health of Pennsylvania.

Years ago it was thought that machinery would to a great extent do away with labor; but now we know that it makes for greater production and more intelligent labor. In return, labor is awake to new demands, and must be given a better style of living. The laboring man has tried to find it for himself in better clothes and new amusements. So far he has been unsuccessful, but for the welfare of the community as a whole, as well as of the working man himself, he must find this better living in a better home.

Let us consider conditions as they are for a few moments. It is a common observation that the tendency of recent years, with the great development of industry, has been the concentration of population into cities and towns. With no one responsible for solving their housing problems, what has happened? The overcrowding of land with all sorts and conditions of buildings and the overcrowding of old houses, not adapted to new conditions, by the unskilled laborer and his family. The lack of proper planning has resulted in a heterogeneous mass of homes, frequently insanitary, becoming the breeding place of diseases that affect the whole community. As some one has said: "The home of the average workman is a place to eat in, to sleep in, and to keep away from as much as possible."

Housing Defects and Mortality.

It is to be regretted that an absolute measure of the importance of each housing defect cannot be determined, but it is interesting to note in the report of the Children's Bureau of the United States Department of Labor, on the infant mortality of Johnstown, that in homes where water was piped into the house the infant mortality rate was 117.8 per thousand, as compared with a rate of 179.9 in homes where the water had to be carried into the house from outdoors—a difference of 80 per thousand; and that in the home of 496 live born babies, where bath tubs were, the

infant mortality rate was 72.6, while it was more than double, or 164.8, where there were no tubs.

In dry houses of Johnstown we find the infant mortality rate is 122.5 per thousand, while in damp houses it is 156.7 per thousand. In homes in which there are water closets the rate is 108.3 against a rate of 159.3 for homes that use the yard privy; also homes with clean yards have a rate of 99.9 against a rate of 169.3 for homes with unclean or filthy yards.

Importance of Ventilation.

Ventilation is another important item that seems to indicate the intimate relation existing between good housing and good health. For we find, out of a total of 1,389 babies who lived at least one month, that the infant mortality rate was 87.8 for the whole city; of those who slept in rooms rated as well ventilated, the rate was 28.1; of those who slept in rooms rated as poor, the rate was 169.3—a difference of 140 per thousand. Sir Arthur Newsholme, the great English authority on public health, rightly says, "Infant mortality is the most sensitive index we possess of the sanitary condition of the home."

Attempt has been made by health regulations on the one side and by building restrictions on the other to control and correct insanitary conditions in existing buildings and to prevent their development in new.

Responsibility of Employers.

Should public opinion hold large employers of labor responsible for the proper housing of their men? Assuming this responsibility voluntarily, an increasing number of corporations are finding an indirect return financially in the increased efficiency of their workers.

Public opinion will be called on to help solve this question of responsibility, which becomes a serious one, considering the large groups of workmen called suddenly together in such places as our large industrial plants. In this relation, I might speak of the attempt

wherein citizens need to be shown in some rational way why certain changes in the interest of health should be made.

The Community's Burden.

The State and the municipalities must assume the burden of giving a wise direction to all new housing operations, and especially to the alterations of old buildings into multiple habitations. Municipal regulation must meet local needs, being guided by the State when conditions become too complex and powerful for the local forces to successfully cope with them. Encouragement must be given to builders to construct houses planned so as to provide an adequate supply of light and air, protected by municipal regulations which prevent land overcrowding as well as room overcrowding, and of a moderate cost so that they may be occupied by those who can only afford to pay a low monthly rental.

It has been proved that workmen's homes of a high grade can be built to rent at a price within reach of the ordinary laborer, and yet pay a net return on the investment of 5 per cent.

But with our inventive genius and the keenness of our business men when they realize the situation, I venture to predict that the next ten years will present a very different form of growth in our cities and towns, where civic pride will flourish and the whole group benefit from the working out of the housing problem on a scientific basis.

Extracts from National Housing Association Publication, No. 41.

THE COZY FOUR-ROOM FLAT.

You hear a good deal in large cities and on small incomes about the "cozy four-room flat." Now, "cozy" is a grand little word, and looks well in an ad, and conjures up visions of tiny tea-cups and toe-touching teta-tetes. It appeals to a woman's dollhouse instincts and matches up well with a man's bank account. But—

The rooms in some cozy four-room flats are too small altogether, and especially too small separately. We remember we lived in one once that stood on a 30-foot lot, and life therein was just one grand choking sensation. The only way to enjoy one of those rooms was to sit on the window sill like a window washer and look in. We had to give it up finally when we bought the preclerator and couldn't get anything smaller than a five-cup size.

An apartment house should have large, airy rooms like they have in the country and in advertisements. Some of them are just about as light and airy as Chopin's Funeral March. They often open on a court and end in a divorce one. There are times when even the most loving couple should be more than 6 feet

apart. A bride is likely to weary of a husband when she never gets out of sound of the ticking of his watch.

Advertising is wonderful anyway, isn't it? The young couple always falls for the "four cozy rooms" stuff, but if the landlord advertised "four small rooms" he would never get a tenant. Now, a moderate amount of coziness is all right; but you will notice that the dove, the national bird of all lovers, lives in a cote and not on a nest.

Like everything else, the cozy four-room flat can be carried to extremes. There are times when it won't do. It is a poor place to practice the cornet or to take singing lessons. To every soul there come moments when one longs to soar away to some distant realm of heavenly azure, and one of them is when your wife is trying to make E, or your husband is corneting in your little flat and the cornet is a little flat itself.

The agent will tell you how "intimate" these cozy four-room flats are. Intimate is right. There is nothing in the world quite as intimate as corned beef and cabbage cooking in a kitchenette. It just makes itself at home all over the house. That is one thing we do not like about corned beef and cabbage. It has so little privacy about it. One may be able to conceal a murder, but never corned beef and cabbage.

So we are not wildly enthusiastic over, even moderately delighted by, the cozy four-room flat if it is too cozy. It makes us long too much for a life on the ocean wave or in the middle of an untenanted prairie. It makes us want to stretch our arms and yell, and it has the same effect on the baby; and the baby isn't as good at restraining its emotions as we are.

Honestly, we think we could be more content with seven large rooms, even if they weren't quite so blamed cozy.—"Building Age."

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggio give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.		Floor Plates.		Refrigerators.	
Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.		Alan Wood Iron and Steel Co., Widener Bldg., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.	
Ridpath & Potter Co. Bourse Bldg., Phila.		Furnaces and Ranges.		Henry M. Miller. 46-48-50 N. 2d st., Phila.	
John B. Rulon. 1355 Colwyn st., Phila.		Borden Stove Co. 1311-13 Arch st., Phila.		Reinforcing Bars.	
Artists' and Architects' Supplies.		Henry M. Miller. 46-48-50 N. 2d st., Phila.		Truseon Steel Co. Commonwealth Bldg., Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Richardson and Boynton Co 1332 Arch st., Phila.		Roofing.	
Warren-Knight Co. 136 N. 12th st., Phila.		Garage (Portable)		The Barrett Co. New York City and Phila.	
F. Weber & Co. 1125 Chestnut st., Phila.		Service Equipment Co. Bourse Bldg., Phila.		Roofing Tile.	
Blue Prints.		Granite.		O. W. Ketcham. Builders' Exchange, Phila.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Holmesburg Granite Co., Commercial Trust Bldg., Phila.		Scales.	
F. Weber & Co. 1125 Chestnut st., Phila.		Hauling Contractors.		The Fairbanks Co. 7th and Arch sts., Phila.	
Blue Print Paper.		Barber Contracting Co., 1127 Land Title Bldg., Phila.		Sewer Pipe and Flue Linings.	
Chas. H. Robbins. 125 S. 11th st., Phila.		Heating Contractors.		C. F. Shellenberger. Builders' Exchange, Phila.	
Brick (Face, Etc.).		Bowers Bros. & Co. 1629 Ludlow st., Phila.		Sewage Disposal.	
O. W. Ketcham. Builders' Exchange, Phila.		Heating Boilers.		Harrison, Mertz & Emlen, Inc., Commercial Trust Bldg., Phila.	
Brick Renovating.		Borden Stove Co. 1311-1313 Arch st., Phila.		Soundings.	
Adolph Christensen. 1433 Brown st., Phila.		Fleck Bros. Co. 44 N. 5th st., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
Builders.		Richardson and Boynton Co 1332 Arch st., Phila.		Ridpath & Potter Co. Bourse Bldg., Phila.	
Hogg Construction Co., Inc., 1634 Sansom st., Phila.		Insurance.		John B. Rulon. 1355 Colwyn st., Phila.	
Mitchell Bros. 2125 Race st., Phila.		Harris J. Latta. Penna. Bldg., Phila.		Sprinklers.	
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David France Co., Tasker st. wharf, Delaware River, Phila.		Lighting Fixtures.		Terra Cotta (Architectural).	
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Service Equipment Co. Bourse Bldg., Phila.		Lumber.		Test Borings.	
Cement.		James E. Tague & Co., 10th and Columbia ave., Phila.		Artesian Well Drilling Co., Real Estate Trust Bldg., Phila.	
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126th Annual Statement

December 31, 1917

Cash Capital	-	\$ 4,000,000.00
Reserve for Premiums	-	10,630,740.40
Reserve for Losses	-	4,419,000.00
Reserve for Taxes	-	950,000.00
Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
Losses Paid Since Organization	-	192,518,273.33

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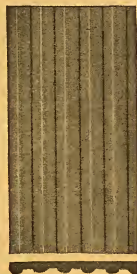
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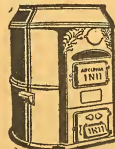
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PHILADELPHIA



Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 35
August 28, 1918

ISSUED WEEKLY IN THE INTERESTS OF ARCHITECTS, STRUCTURAL ENGINEERS,
CONTRACTORS AND THE MATERIAL AND EQUIPMENT TRADES

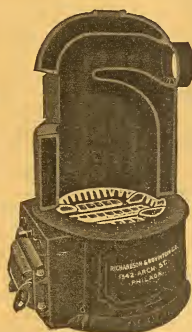
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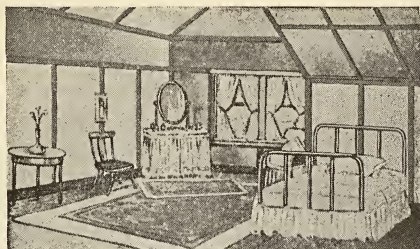
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(152)

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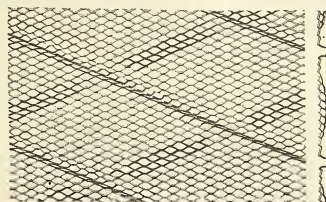
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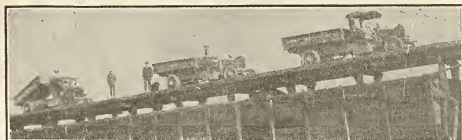
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural

VOLUME XXXIII

Number 35

Engineering and the Building Trades

PHILADELPHIA

August 28, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide

PUBLISHED WEEKLY

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As The Editor Sees It



THERE has been so much said about the Industrial Housing Problem confronting America today, that every thinking person must realize the seriousness of the situation. And there has been so much argument in favor of solving the problem by erecting houses for the workmen which will satisfy the normal human's desire for a home in which he may take pride and which he may call his own.

It is impossible, however, to say too much in favor of so sane and humane a solution of the problem and as Mr. Hoggson, President Hoogson Brothers, Builders, of New York, sees it, there are still many who would follow and entirely different and illogical course. Mr. Hoggson says:

"There is, and has been for some time, a shortage of houses for workmen. The situation has been serious,—'acute' is the word most commonly used to describe it. It was necessary that adequate housing be provided for industrial workers. It appeared to be an 'emergency' case.

"Any emergency these days brings forth scores of freak solutions. The Patent Office is swamped with devices for winning the war. So with housing. All sorts and kinds of schemes for temporary shelter and permanent developments have been proposed. As to the dangers in temporary shack construction, I had occasion to address myself sometime ago. But the danger in providing hastily thrown up shacks for workers is slight

compared to the great danger of freak permanent developments.

"I do not mean that we should avoid taking advantage of innovations and betterments. Leave it to the genius of this country to adopt the latest and best ideas—and enhance their value by improvements.

"But, at the same time, this is not the moment for reckless experimentation. Industrial housing is fairly a new problem with us, but an old one in England. The British have solved their problem. While conditions here in America are somewhat different, the underlying principles are the same, so we have a firm basis on which to work. The preliminary experimentation has been performed for us. We have the results to work from.

"Therefore let us avoid freaks. There has been a suggestion advanced that model tenements be erected in these new industrial villages. Fancy, with all the land that is available in these small communities, enough room for every man to have a house and a yard and a garden, where a community can spread out, we are asked to build tenements, coops for humans, buildings going up with the air, with congestion, and all its evils.

"In London, where congestion has ruled, the tenement has been doomed. The London slums are being done away with, and tenements are forerunners of slums. No, we don't want any tenements in these new industrial villages, nor do we want barracks. Well planned community houses or group houses, yes.

They have individuality, which is only one of their manifold advantages.

"The Government, assisted by some of the ablest architects, builders, welfare workers and industrial experts, has worked for months to formulate a definite housing policy. A set of standards has been 'recommended.' Recommendations in these days, coming from official sources, generally may be construed as orders. With such an outstanding figure as Mr. Eidlitz, the New York builder, in charge of a large part of housing work to be done by the Government, or with the aid of the Government, we may rest assured that the developments carried out under his responsibility will be on a high plane of practical, efficient idealism.

"All other developments of a private nature should measure up to the same high plane. Freak plans, freak methods, will never do. After all, the man to be satisfied is the worker and his family. C. Stanley Taylor, in The Hoggson Magazine, reports the result of an analysis of housing conditions which he made for the Government in the middle West. During his investigations he questioned the general manager of a munition concern regarding the benefits which had accrued through providing houses for its workmen. The general manager said:

"The best mechanics who come here for jobs are married men who journey from distant towns and cities, attracted by the wage scale. They leave their families behind while they come to 'try out' the place. They are most usually good

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workmen. After finding a room for temporary quarters, they look around for a house to rent. There are none. The man likes his job. He likes us. But he computes the additional cost of living apart from his family, so he goes back, or seeks another place where he may find a home. We have lost nine out of every ten married men we have hired during the last year: the reason is simply because they were human and wanted to live 'at home.' They are the best kind, the home-

loving, steady-going, dependable workmen. We had to have them. That's why we build homes!"

"Yes, that's why that concern is building homes, and it was noticeable that the general manager said *homes* and not *houses*, and in that one word '*homes*' he laid bare the secret of success of industrial housing viewed from the standpoint of investment. Build homes—not merely houses!"

"And away with all freak theories!"

WHY NOT A BUILDING ADMINISTRATOR?

By Noble Foster Hoggson

President, Hoggson Brothers, Builders

Mr. Bryan's million men—and more—have sprung to arms, if not over night, in an almost incredibly short time. This country has truly made its business, war. Some industries have made war their business. They are the ones which have prospered. On the other hand, the average pre-war business organization has found the going difficult.

No one expects the affairs of this country, or of general business, to be normal in these times. Things either are abnormal or sub-normal. There is great business prosperity or great business depression. It is reasonable that there should be curtailment in practically every line of industry. But how far can curtailment go before there is nothing left to curtail, or before there is not enough business to let us know that there is such a thing as business?

Shortly after this country entered the war, President Wilson cautioned the strictest economy. This caution was taken so literally, and forecast such serious consequences to all business, that a member of the Council of National Defense explained in an interview, given the widest circulation, that the President had not meant that in practicing economy we should kill business. It was declared that "waste is bad, but an indiscriminating economy is worse. Unemployment and closed factories brought about through fitful and ill-advised campaigns for public and private economy, will prove a veritable foundation of quicksand for the serious work we have on hand. We need prosperity in war time even more than when we are at peace. Business depressions always are bad, but doubly so when we have a fight on our hands. We need more business, not less. There is real danger in hysteria. Indiscriminate economy would be ruinous. Now is the time to open the throttle."

Those statements are as true now and even more in point than when they were issued. Business must be allowed to live. It is necessary that all businesses *essential* to the normal activities of the country continue on a sound basis. It is the regular, normal business industries that must really bear the

burden of taxation, and contribute most largely to the support of the war, by buying Liberty Bonds, aiding the Red Cross, Y. M. C. A., Knights of Columbus, and other war activities. Taxes on profits made by war industries will provide enormous sums now, but neither the war nor war profits will last forever. So it is the normal business, the average individual who pays the taxes and actually supports the Government.

But how long will normal business be able to pay a tax on its profits? Unless we are careful there will be no business in certain lines, and with no business there will be no profits, and with no profits, no tax returns.

Take the building business. In any sort of depression, such as financial stringency or panic, the first business to suffer is that of building. It is the last to recover. Just now the building business is suffering its worst slump. Private building is nil. It is not because there is no private building work to be done; not because private building is unnecessary. It is because certain unofficial individuals began advising that building be stopped. They prevented banks from building when the banks were in particular need of additional facilities for carrying on their work. They were the cause of stopping nearly all construction work. They spread a report—and it was prettily generally believed—that the Government desired that no private building work be done.

Then, only a short while ago, Secretary McAdoo stated very emphatically that the Treasury Department had never even suggested that "building actually needed for the health and protection of the civil population or for the conduct of essential business of the country should not be constructed during the period of the war."

Secretary McAdoo's statement has by no means offset or counteracted the erroneous impression that has prevailed. Buildings are needed, but owners are really afraid to go ahead with their plans, so conscientious is the average individual about not interfering with the war program.

The building business, except for war ac-

tivities, is practically at a standstill. What is needed is a Building Administrator, who would do for building what Mr. Hoover has done for food. No builder, and no owner, would object to strict regulation.

A Building Administrator would solve the entire building problem. He, through his organization, could determine in short order whether a contemplated building was essential or not, whether materials could be spared for its erection, whether the labor situation was favorable. He would be governed by the facts in each individual case.

In a recent address at Atlantic City, to the National Federation of Building Industries, Senator Calder, of New York, said:

"To abandon constructive intent is to shut off the source of power and attempt to run on the momentum of previous constructive achievement, thus making of time an enemy rather than an ally. To shut off the wealth producing industry of a nation is like shutting off the motive power of an airplane—instead of controlled and accelerated progress it means an involuntary landing within a limited radius.

"No industry in all the country is more wealth-producing than the building industry. It creates wealth; it makes additional taxable property from which taxes are more easily collected than from any other source. It increases land values, in fact it is the fundamental source of wealth, and if any line of endeavor should be encouraged, it seems to me the one in which you are interested ought to receive the fullest consideration."

The building business will be the greatest and most essential business after the war—not only at home, but abroad. The men who have spent a lifetime in creating organizations for carrying on building construction should certainly not be wiped out now. Matters should be regulated so that when the reconstruction period comes the building industry will be equipped to adequately handle the big tasks which will confront it. Theodore Starratt once said:

"Merely as a word—an idea—the term building is one of the greatest in our language. Builders are the successors of the soldiers of old. When this present business of soldiering is done and peace comes it will be the builders who will inherit the indomitable soldier spirit, and upon them—the constructors—will be centered the interest the warrior has inspired."

Let's prepare for that time now. Keep the building industry on its feet. And one way to do this will be through the appointment of an intelligent "Building Administrator."

One of the earliest housing projects in the history of the country was completed at Erie, Pa., 105 years ago. Buildings were needed in that village to house men engaged in the construction of Perry's fleet. The buildings were constructed, the fleets completed and equipped, and a most notable chapter in American naval history followed.—Ex.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Emergency Hospital Buildings (15), Navy Yard, Philadelphia, Spec. 3334, \$650,000. Architect, private plans. Owner, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Nurses' Quarters, 3 stories, 248x52 feet, Subsistence Building, 2 stories, 202x60 feet, Barracks (2), 2 stories, 117x30 feet, Administration Building, 2 stories, 60x30 feet, Observation Ward, 2 stories, 173x38 feet, Wards (8), 2 stories, 173x118 feet, Garage, 1 story, 30x20 feet, frame, brick, hollow tile, stucco, wood piles, ready, slag and canvas roof, composition, cement and yellow pine floors, metal lath, elevators, ventilators, metal window guards, kalamain doors, galvanized steel skylights, refrigerators, dumbwaiters, steam heating, electric lighting. Owners taking bids, due September 6 at 11 A. M. The following are figuring: Wm. R. Dougherty, 1610 Sansom street, Warren-Moore Co., Colonial Trust Building, Cramp & Co., Denckla Building, Thos. Reilly, 1616 Thompson street, F. W. Mark Construction Co., Finance Building, Hogg Construction Co., 1634 Sansom street, Geo. F. Pawling Co., 1432 S. Penn Square, M. H. McCloskey, Jr., 1620 Thompson street, Turner Concrete Steel Co., 1713 Sansom street, Melody & Keating, 1322 Race street, W. W. Anstine & Co., 1218 Filbert street, and J. S. Rogers Co., Drexel Building, Wm. Linker Co., 831 Filbert street, all of Philadelphia, are figuring.

Mill Building, Church Lane and Lena street, Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, Hamill Spinning Co., on premises. Stone, reinforced concrete, terra cotta coping, 3 stories and basement, 128½x44½ feet, stone foundations, slag roof, steam heating, electric lighting, rolled steel sash, tin lined doors, kalamain doors, rolling steel doors, ice escapes, iron stairs, cement and yellow pine floors, metal lath, safety treads, roof ventilators, waterproofing, cold water painting. Wm. Steele & Sons, Sixteenth and Parkway, Philadelphia, are taking sub-bids.

Emergency Hospital Buildings, Grays Ferry Road, Philadelphia, Spec. 3297, \$355,000. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hospital Corps Barracks (2), 2 stories, 118 feet 10 inches x 164 feet 10 inches, Nurses' Quarters, 3 stories and basement, 192x65 feet, Subsistence Building, 1 story, 142x45 feet and 34x70 feet, Boiler House and Laundry, 2 stories and mezzanine, 67x48 feet, Wards (8), 2 stories, 113x190 feet, Observation Ward, 2 stories, 39x190 feet, Officers' Ward Building, 2 stories, 107 feet x 33 feet 10 inches, Shed, 1 story, 80x30 feet, frame, hollow tile, brick, concrete foundations, ready and slag roof, composition and cement floors, metal lath, ventilators, fireproof and tinclad doors, kalamain doors, steam heating, electric wiring. Owners are taking bids due August 29th at 3 P. M. Thomas C. Trafford,

1613 Sansom street, Hogg Construction Co., 1634 Sansom street, Wm. R. Dougherty, 1610 Sansom street, F. W. Mark Construction Co., Finance Building, Warren-Moore Co., Colonial Trust Building, W. W. Anstine & Co., 1218 Filbert street, Cramp & Co., Denckla Building, Thos. Reilly, 1616 Thompson street, J. S. Rogers Co., Drexel Building, Geo. F. Pawling & Co., M. H. McCloskey, Jr., 1620 Thompson street, Melody & Keating, 1322 Race street, and Turner Concrete Steel Co., 1713 Sansom street, all of Philadelphia, are figuring.

Submarine Battery Storage Building, Spec. 3252, Navy Yard, Philadelphia. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, hollow tile or wood, 1 story, 341x90 feet, concrete foundations, ready roofing, mastic or cement floors, steam heating, electric lighting, rolled steel sash, metal covered doors, waterproofing. Lowest bid submitted by Turner Concrete Steel Co., 1713 Sansom street, Philadelphia, \$129,750, 90 days.

Garage and Showroom, Broad and Cumberland streets, Philadelphia. Architect, private plans. Owners, L. S. Hall & Co., 800 North Carlisle street, Philadelphia. Brick, stone foundation, 1 story, 70x160 feet, slag roof, cement floor, steam heating, electric lighting, hollow metal skylights, roof ventilators. Owners taking bids. H. H. Wehmeyer, 509 West Cumberland street, Philadelphia, is figuring.

Residences (2600), 40th Ward, Philadelphia. Architect, private plans. Owners, Emergency Fleet Corporation, 136 South Sixteenth street, Philadelphia. Brick, 2 stories, slag roof, pine floors, hot air and steam heating, electric lighting. Plans in progress.

Warehouse and Garage, 522-32 North Third street and 521-31 North Orianna street. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care Architect. Brick, slow burning construction, 1 story, 100x178 feet, slag roof, electric lighting. Architect taking bids. Conneen Construction Co., 1737 Filbert street, F. B. Davis, 240 North Sixteenth st., Matthew King, 3714 Fairmount avenue, Ketcham & McQuade, 1029 Brown street, Jos. Levin Co., 1530 South Sixth street, E. J. Kreitzburg, 1345 Arch street, H. H. Weyer, 509 West Cumberland street, David A. McClelland, 4011 Baring street, Riath Construction Co., 304 Master street, John R. Wiggins & Co., Otis Building, A. L. Fretz & Sons, Heed Building, John M. Yardley, 1716 Sansom street, and Monaghan & Losse, Inc., 3016 Chestnut street, are figuring.

Garage, Bailey and Cambria streets, Philadelphia. Architect R. H. Pepper, 1808 North Seventh street, Philadelphia. Owner, name withheld. Brick, 1 story, 21x9½ feet, slag roof, cement floor, mill work, ornamental iron work. Plans completed. Architect is ready for bids.

Residences (2 prs. Twins), Foulkrod and

Duffield streets, Philadelphia. Architects, Lachman & Murphy, Drexel Building, Philadelphia. Owner, George S. Wardle, 5108 Duffield street, Philadelphia. Brick, 3 stories, 16x50 feet, slate roof, hot water heating, electric lighting, tile and marble work. Owner is taking bids due as soon as possible. Geo. L. Croll, Rosemont Pa., and Rush Bros., 1100 Fillmore street, are figuring.

Store and Dwelling (alts. and add.), 868 North Marshall street, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin street, Philadelphia. Owner, R. Gollub, 875 North Marshall street, Philadelphia. Brick, 3 stories, 18x70 feet, slag roof, heating, electric lighting, yellow pine floors, tile work and general interior and exterior alterations, flush bulk. Owner is ready for sub-bids.

Bank (add.), 1006 West Lehigh avenue, Philadelphia. Architect, Wm. H. Wooters, 816 West Allegheny avenue, Philadelphia. Owners, Excelsior Trust and Saving Fund Co., care of Samuel C. Abernethy, 2724 North Fifth street, Philadelphia. Brick, 2 stories, 20x25 feet, mansard slag roof, stone foundations (heating and lighting reserved), yellow pine floors, iron work. Plans completed. Owners are ready for bids.

School (alts.), Webb and Madison streets, Philadelphia, \$10,000. Architect, Louis H. Giele, 1123 Broadway, New York City. Owners, St. Adalbert's R. C. Church, care of Rev. M. Moniekiewicz, 2645 East Allegheny avenue, Philadelphia. Brick, 3 stories, general alterations, are tower. Architect will supervise construction.

Roof and Skylight Repairs, City Hall, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, 113 City Hall. Consists of general repairs to City Hall roof and skylights. Owners taking bids, due September 4th at noon. Deposit of \$5.00 required.

Clothing Issue Building, Training Camp, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Paymaster E. H. Cope, Navy Yard, Philadelphia. Frame, 1 story, 42x90 feet, ready roof, wood floors, roof ventilators. Lowest bids submitted by Conneen Const. Co., 1737 Filbert street, \$12,900; Thos. C. Tafford, 1613 Sansom street, \$12,850, 75 days.

Garage, 2653 East Norris street, Philadelphia. Architect, H. G. Hammer, 803 North Seventeenth street, Philadelphia. Owner, T. E. Wett, Twenty-fourth and Berks streets, Philadelphia. Brick, 1 story, 54x128 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, hollow metal skylights, gasoline storage system, kinnear doors. H. G. Hammer will supervise construction and is taking sub-bids.

Bank (add.), 1006 West Lehigh avenue, Philadelphia. Architect, Wm. H. Wooters, 816 West Allegheny avenue, Philadelphia. Owners, Excelsior Trust and Saving Fund Co., care of Samuel Abernethy, 2724 North Fifth street,

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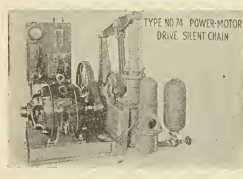
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Philadelphia. Brick, 2 stories, 20x25 feet, mansard slag roof, stone foundation (heating and lighting reserved), yellow pine floors, iron work. Owners taking bids, due September 4th. A. R. Raff Cont. Co., 1635 Thompson street, and P. Haibach Cont. Co., Twenty-sixth and Thompson streets, are figuring.

Additional Refrigerating Facilities. Restaurant, Broad Street Station, Philadelphia. Architects, Maintenance of Way, Broad Street Station, Philadelphia. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. New doorways, cement steps, mezzanine floor, insulated reinforced concrete floors, electric lighting, hollow tile, metal lath, safety treads. Owners taking bids, due September 3rd at 10 A. M. Smith-Hardiean Co., 1606 Cherry

street; Wm. R. Dougherty, 1610 Sansom street; John M. Yardley, 1716 Sansom street; D. Henwood, 1509 Wood street; A. L. Carhart, Penfield Building; Wm. C. Doll Co., Abbott Building; Thos. Little & Son, 1713 Moravian street; E. E. Hollenback, Inc., 1804 Brandywine street; H. R. Rust, 714 Ludlow street; A. R. Raff Cont. Co., 1635 Thompson street; R. C. Ballinger Co., 218 North Thirteenth street; Stacy Reeves & Sons, 2011 Market street; Ketcham & McQuade, 1029 Brown street; Monaghan & Losse, Inc., 3016 Chestnut street; T. J. Carberry, Heed Building; P. Haibach Cont. Co., Twenty-sixth and Thompson streets; Thos. C. Trafford, 1613 Sansom street, and F. A. Havens Co., 845 North Nineteenth street, are figuring.

ed to Frank Achuff, 1600 North Front street, Philadelphia.

Pattern Storage Building. Twenty-first and Callowhill streets, Philadelphia, \$3000. Architects, Harris & Richards, Drexel Building, Philadelphia. Owners, Niles, Bement, Pond Co., on premises. Brick work and general alterations. Contract awarded to H. E. Baton, 1713 Sansom street, Philadelphia.

Library (alts.). Sixty-fifth and Girard avenue, Philadelphia, \$6,000. Architect, Charles Balderston, 411 Walnut street, Philadelphia. Owners, Free Library of Philadelphia, Thirtieth and Locust streets, Philadelphia. Consists of general alterations, brick work, cement floors. Contract awarded to F. A. Havens Co., 845 North Nineteenth street, Philadelphia.

Manufacturing Building. Wingohocking street and Frankford avenue, \$7,500. Architect, private plans. Owners, Philadelphia Felt Co., on premises. Brick, 2 stories and general alterations. Contract awarded to Joseph A. Hand, 8029 Frankford avenue.

Warehouse (add.). 410 Race street, Philadelphia, \$2,000. Architects, Savery & Schetz, Stephen Girard Building, Philadelphia. Owners, Whitall, Tatum Co., on premises. Consists of new toilet rooms. Contract awarded to H. E. Grau Co., 1707 Sansom street, Philadelphia.

Pier No. 27 (Repairs). foot of Noble street, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Department of Yards and Docks, Paymaster, Navy Yard, Philadelphia. General repairs, new windows, partitions, electric wiring, painting, plumbing, heating, glazing, etc. Contract awarded to F. L. Hoover & Son, 1023 Cherry street, \$32,575, 75 days.

Warehouse. Gay above Main street, Manayunk, Philadelphia, \$15,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owner, George W. Davis, Ridge avenue, below Wigard street, Philadelphia. Wood, 3 stories, 60x68 feet, slag roof, wood floors, elevator, fire doors (heating and electric work reserved). Contract awarded to Wm. H. Edleman & Son, 453 Green Lane, Roxboro.

Shouldn't you be a regular subscriber to a paper, such as the "Guide," that fights your battles?

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" information for the Material Man and Interior and Exterior Fitter.

Office Building. Richmond and Norris sts., Philadelphia, \$300,000. Architect, private plans. Owners, Wm. Cramp & Sons Co., on premises. Reinforced concrete, 5 stories, 40x60 feet and 9 stories 24x10 feet, concrete foundations, slag roof, cement floors, steam heating, electric lighting, tile and marble work, terrazzo work, elevators, safety treads, rolled steel sash, fire and kalamein doors, iron stairs. Contract awarded to Stacy Reeves & Son, 2011 Market street, Philadelphia.

Extension to Dry Kiln, Wood Storage Building and Transfer Table. Spec. 3235, Navy Yard, Philadelphia, \$95,000. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, reinforced concrete, 1 story, 65x55 feet, concrete foundations, brick and terra cotta, 1 story, 50x63 feet, composition roof, steam heating, electric lighting, rolled steel sash, tin covered doors, concrete floors, hollow tile, dampproofing. Contract awarded to Thos. Reilly, 1616 Thompson street, Philadelphia.

Temporary Timber Storehouse. Spec. 3242, Navy Yard, Philadelphia, \$129,129. Architect, private plans. Owner, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood, frame, corrugated steel siding, 1 story, 600x150 feet and 800x105 feet, ready roof, concrete floors, concrete foundations, concrete roadways, electric lighting, fire doors. Contract awarded to M. H. McCloskey, Jr., 1620 Thompson street, Philadelphia.

Engine House. Sixty-ninth and Haverford avenue, Philadelphia. Architect, private plans. Owners, Mark D. Wring & Sons on premises. Brick and frame, 1 story, 18x40 feet, slag roof, cement floors. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building, Philadelphia.

Storage Building. 22and 24 Richmond street, Philadelphia, \$9000. Architect, private plans. Owners, G. and H. Barnett, 1078 Frankford avenue, Philadelphia. Brick and steel, 1 story, 32x134 feet, slag roof (heating and lighting reserved), rolled steel sash. Contract awarded

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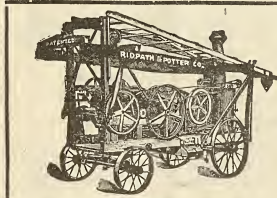
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PENNSYLVANIA Construction News

Storehouses (2), Bag and Ammunition Filling House, Spec. 3288, U. S. Naval Magazine, Fort Mifflin, Pa., \$38,000. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, hollow tile and concrete, 1 story, 30x160 feet and 30x142 feet, slag roof, concrete foundations, cement floors, electric lighting, hollow metal sash, roof ventilators. Owners taking bids due September 3 at 10 A. M. Lam Building Co., 1001 Wood street, Philadelphia, Wark Co., 1737 Filbert street, John M. Yardley, 1716 Sansom street, Monaghan & Losse, Inc., 3016 Chestnut street, J. S. Rogers Co., Drexel Building, and Melody & Keating, 1322 Race street, H. E. Grau Co., 1707 Sansom street, Monaghan & Losse, Inc., 3016 Chestnut street, all of Philadelphia, are figuring.

Storehouses (4), U. S. Naval Magazine, Spec. 3187, Fort Mifflin, Pa., \$136,000. Architect, private plans. Owners, United States Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Owners taking bids due September 3 at 11 A. M. John M. Yardley, 1716 Sansom street, and Wark & Co., 1737 Filbert street, Philadelphia, are figuring.

Residence, Bethlehem, Pa., \$10,000. Architect, A. W. Leh and J. M. Green, Jr., Fourth street and Brodhead avenue, Bethlehem, Pa. Owner, F. A. Knouss, 28 South Main street, Bethlehem, Pa. Brick and stucco, 2½ stories, 18x38 feet, slate roof, stone foundations, electric lighting. Plans in progress.

Parish House, East Fourth street, Bethlehem, Pa., \$7000. Architect, C. P. Spangenberg, 504 Wyandotte street, Bethlehem, Pa. Owner, Windish Lutheran Church, care Rev. Ernest A. Steiglet, 735 Church street, Bethlehem, Pa. Brick, 2 stories, 32x26 feet, slate roof, electric lighting. Plans in progress. Architect will be ready for bids in about ten days.

Stores (4) and Apartments (16), 425-29 E. Third street, South Bethlehem, Pa. Architect, H. J. Wiegner, Bethlehem Trust Building, South Bethlehem, Pa. Owner, Aaron Pot-

such, East Third street, South Bethlehem, Pa. Brick, 3 stories, 100x80 feet, slag roof, brick and concrete foundations, steam heating, electric lighting, tile and terrazzo work, metal skylights, fire doors, yellow pine floors, hollow tile. Owner will build.

School, Summit Hill, Pa., \$20,000. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Summit Hill School District, care of Harry Houser, treasurer, Summit Hill, Pa. Brick, concrete foundations, 2 stories and basement, 62x72 feet, asbestos roof, hardwood floors, steam heating, electric lighting, tile work. Architect will take bids in about two weeks.

Residence, Danville, Pa. Architect, F. A. Nelson, Connell Building, Scranton, Pa. Owners, Memorial Hospital, care of Superintendent Geisenger, Danville, Pa. Frame, 2 stories, L shaped, 90x70 feet, concrete foundations, shingle roof, hardwood floors, steam heating, electric lighting, tile work. Plans in progress.

Silk Mill, Charles street, Nanticoke, Pa., \$20,000. Architect, Austin L. Reilly, Bennett Building, Wilkes-Barre, Pa. Owners, Liberty Throwing Co., care of H. Epstein, Nanticoke, Pa. Brick, 1 story, 100x140 feet, steam heating, electric lighting, wood floors. Owners will soon take bids on superstructure.

Residence, Dallas, Pa., \$5,000. Architect, Frank R. R. Sham, Second National Bank Building, Wilkes-Barre, Pa. Owner's name withheld. Frame, 2½ stories, 22x36 feet. Architect will take bids.

Residence, Lunckhannak, Pa., \$5,000. Architect, T. E. Podmore, Bennett Building, Wilkes-Barre, Pa. Owner, J. B. Henning, F. O. Lunckhannak, Pa. Frame, 2½ stories, 30x36 feet, shingle roof, concrete foundations, hot air heating, electric lighting, pine floors, concrete work. Owner is taking bids.

Residences (800), Chester, Pa. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Government, Bureau of Industrial Housing and Transportation, Washington, D. C. Brick, 2 stories. Plans in progress.

Engine House, Rutherford, Pa. Architect,

Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Brick, steel, reinforced concrete, terra cotta coping, 1 story, 132x114 feet, concrete foundations, asbestos roof, concrete floors, metal lath, rolled steel sash, ventilators, concrete pit, 150x4 feet. Owners taking an additional bid, due August 30th, from Pomeroy Const. Co., 1609 Rantstead street, Philadelphia.

Residence (alt. and add.), Haverford, Pa. Architect, C. W. Churhman, 1525 Locust st., Philadelphia. Owner's name withheld. Stone and stucco, addition, brick and stucco, 16x20 feet, tin roof, hardwood floors, hot air heating, electric light, tile work, plumbing. Plans about completed. Architect will be ready for bids in ten days.

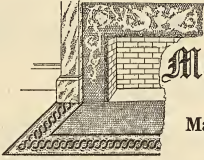
Rectory, Moore, Pa. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, St. James' Church, Moore, Pa. Stone and frame, 2 stories, 23½x53 feet, slate roof, hot air heating, electric lighting. Architect taking bids, due as soon as possible. E. E. Hollenback, Inc., 1804 Brandywine street, and H. E. Grau Co., 1707 Sansom street, are figuring.

Battery House, Manville Junction. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Brick and concrete, 1 story, 18x40 feet. Owners taking bids, due September 3rd. Mitchell Bros., 2125 Race street; A. L. Carhart, Penfield Building; F. A. Havens Co., 845 North Nineteenth street; Pringle Borthwick, 8018 Germantown avenue; F. W. Van Loon, Deneka Building, and Charles McCaul Co., 1713 Sansom street, are figuring.

Battery House, Melle Meade, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Brick and concrete, 1 story, 18x40 feet, J-M roof, cement floors, electric lighting. Owners taking bids, due September 3rd. Mitchell Bros., 2125 Race street; A. L. Carhart, Penfield Building; F. A. Havens Co., 845 North Nineteenth street; Pringle Borthwick, 8018 Germantown avenue; F. W. Van Loon, Deneka Building, and Charles McCaul Co., 1713 Sansom street, are figuring.

Residence, Pottstown, Pa. Architect, Chas. Barton Keen, Bailey Building, Philadelphia. Owner, J. B. Marshall, Pottstown, Pa. Stone,

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Building, Seranton, Pa. Owners, Board of Education of Nicholson, care of architects. Frame and stucco, 2 stories and basement, stone foundations, slag roof, steam heating, electric lighting, tile and marble work, ornamental tile work, metal lath, roof ventilators. Contract awarded to G. C. Rought Lumber Co., Nicholson, Pa.

Warehouse, Seranton, Pa. Architect, E. H. Davis, Seranton, Pa. Owners, Macear Truck Co., Seranton, Pa. Frame, 1 story, 50x100 feet, slag roof. Contract awarded to E. A. Fuller, Seranton, Pa.

Store and Loft Building, Washington avenue, Seranton, Pa., \$50,000. Architect, David H. Morgan, Connell Building, Seranton, Pa. Owner, Mary J. Kiesel, Lackawanna avenue, Seranton, Pa. Brick and terra cotta, 5 stories, 40x150 feet, slag roof, steam heating, electric lighting, tile and marble work, concrete foundations, maple floors, metal lath, roof ventilators. Contract awarded to L. T. Stipp, Union Bank Building, Seranton, Pa.

School (alts.), Edwarsville, Pa. Architect, James A. Boyle, Bennett Building, Wilkes-Barre, Pa. Owners, Edwarsville School District, care of Richard Powell, secretary, Edwarsville, Pa. General repairs to buildings. Contract awarded to Mark Williams, Wells street, Westmore, Kingston, Pa.

Double Residences (10), Seck, Schuylkill County, Pa., \$8,000. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh Coal and Navigation Co., care of L. D. Warriner, president, northeast corner of Tenth and Chestnut streets, Philadelphia. Hollow tile, brick and stucco, 2½ stories, 52x28 feet, slate roof, hot air heating, electric lighting, pine floors. Contract awarded to Dodson Realty Corp., Bethlehem, Pa.

Boarding House, Seck, Schuylkill County, Pa. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh Coal and Navigation Co., care of L. D. Warriner, president, northeast corner of Tenth and Chestnut streets, Philadelphia. Hollow tile, brick and stucco, 1½ stories, 30x60 feet, slate roof, hot air heating, electric lighting, pine floors. Contract awarded to Dodson Realty Corp., Bethlehem, Pa.

Residences (4) (3 Family), Shenandoah, Pa., \$9,000. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Locust Mountain Coal Co., Shenandoah, Pa. Clinton sheathing and stucco, 1½ stories, 24x60 feet, stone foundations, slate roof, pine floors, hollow tile, electric lighting, metal lath. Contract awarded to Dodson Realty Co., Bethlehem, Pa.

Garage, Dorranceton, Pa., \$6,000. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Dorranceton Silk Works, care of architect. Brick and concrete, 1 story, 27x82 feet, slag and gravel roof, electric lighting, terra cotta, hollow metal skylights, fire doors, waterproofing, oil house and gasoline system. Contract awarded to Shepherd Const. Co., Miners' Bank Building, Wilkes-Barre, Pa.

Double Residences (12), Kaska Williams, Pa. Architect, George S. Welsh, Coal Exchange

2½ stories, 60x20 feet and 19x26 feet, shingle roof, hot water heating, electric lighting. Owner taking sub-bids.

Air Compressor Building, Rutherford, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Concrete and frame, 1 story, 30x65 feet, K. & M. shingle roof, concrete floors. Owners taking bids, due September 30th. Mitchell Bros., 2125 Race street; A. L. Carhart, Penfield Building, and Pomeroy Const. Co., 1609 Ranstead street, are figuring.

Service and Trade Building, Quincey, Pa., \$40,000. Architect, W. J. Kast, 222 Market street, Harrisburg, Pa. Owners, United Brethren Orphanage and Home, Quincey, Pa. Brick, 2 stories and basement, 50x120 feet. Preliminary plans in progress. Too early for details.

Normal School (alts.), Shippensburg, Pa., \$10,000. Architect, M. J. Kast, 222 Market street, Harrisburg, Pa. Owners, Shippensburg State Normal School, Shippensburg, Pa. Brick, reinstalling heating plant, plumbing. Owners taking bids, due August 29th. Evans & Ovedier, Lancaster, and Yard & Keeping, York, Pa., are figuring.

Store Building (alts.), 28 East King street, Lancaster, Pa., \$2,000. Architect, C. E. Urban, Woolworth Building, Lancaster, Pa. Owners, Sayres, Scheid & Sweston, Lancaster, Pa. New front, plate glass, tile and wood work. Architect taking bids. Frank Bechman, W. H. Flick, Samuel H. Bally, and Herman Wiant, all of Lancaster, Pa., are figuring.

PENNSYLVANIA Contracts Awarded

Engine House Extension and Turntable Pit (add.), St. Clair, Pa., \$41,000. Architect, private plans. Owners, Philadelphia and Reading Railway Co., care Samuel T. Wagner, C. E., Reading Terminal, Philadelphia. Reinforced concrete, brick, terra cotta coping, concrete foundations, asbestos roof, wood block floors, metal lath, whitewashing, 20 feet extension to (7) Stalls, (4) L-shaped Service Pipe Pits, 3½x3½ feet, Turntable Pit enlargement from 85½ feet to 102 feet diameter. Contract awarded to F. A. Havens Co., 845 North Nineteenth street, Philadelphia.

School (alt. and add.), Willow Grove, Pa. Architects, Heacock & Hokanson, Bailey Building, Philadelphia. Owners, Abington Township School Board, Abington, Pa. Stone, second story addition, 46x32 feet, slag roof, steam heating, electric lighting, stairways, pine floors. Contract awarded to Specht & Sperry, Heed Building, Philadelphia.

Garage, Northampton Heights, Pa., \$5,000. Architect, H. J. Wiegner, Bethlehem Trust Building, Bethlehem, Pa. Owner, James F. Miller, Northampton, Pa. Brick, 1 story, 44

x20 feet, slag roof, cement floors, electric lighting. Contract awarded to Stoneback & Nace, Quakertown, Pa.

Church (superstructure) and Parish House, North Main street, Pittston, Pa., \$40,000. Architect, J. J. Howley, Traders' Bank Building, Seranton, Pa. Owners, St. Michael's Greek Catholic Church, care of Rev. V. Luba, 205 North Main street, Pittston, Pa. Brick, 2½ stories, 40x126 feet and 30x56 feet, slate roof, stone foundations, steam heating, electric lighting, hardwood floors, tile and marble work, roof ventilators. Contract awarded to Almo Bros., Pittston, Pa.

School (alts. and add.), Throop, Pa., \$30,000. Architect, J. J. Howley, Traders' Bank Building, Seranton, Pa. Owners, Board of Education, care of M. J. Magaman, Throop, Pa. Frame, 4-room addition, 2 stories, 40x36 feet, slate roof, stone foundations (heating and plumbing reserved), stone foundations, electric lighting. Contract awarded to Hagen Lumber Co., Hickory and Mattes streets, Seranton, Pa.

School, Nicholson, Wyoming County, Pa., \$23,000. Architects, Morris & McHale, Burr

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Building, Wilkes-Barre, Pa. Owners, Lehigh Coal and Navigation Co., care of L. D. Warner, president, northeast corner of Tenth and Chestnut streets, Philadelphia. Brick and stucco, 2½ stories, 50x30 feet, slate roof, pine floors, hot air heating, electric lighting, hollow tile. Contract awarded to Dodson Realty Co., Bethlehem, Pa.

School, East Fallsfield Township, Chester, Pa. Architect, M. J. Kast, Commonwealth Building, Harrisburg, Pa. Owners, East Fallsfield School Board, E. A. Phillips, secretary, East Fallsfield, Pa. Brick, 1 story, 8 rooms and auditorium. Contract awarded to W. J. Elliott, Catesville, Pa.

Mausoleum, Boyertown, Pa. Architect, D. M. Rothenberger, North Queen street, Lancaster, Pa. Owners, Twentieth Century Mausoleum Co., Reading, Pa. Granite, marble and bronze, tile roof, marble floors, tile and marble work. Architect is sub-letting.

School, Sixth and Woodbine streets, Harrisburg, Pa. Architect, M. I. Kast, Commonwealth Building, Harrisburg, Pa. Owners, School Board of Harrisburg, Harrisburg, Pa. Brick, 2 stories and basement, 100x160 feet (steam heating, electric lighting and plumbing reserved), pine floors, composition roof. Contract awarded to C. W. Strayer, Harrisburg, Pa.

Miscellaneous Construction News

Naval Auxiliary Reserve School, Naval Training Station, Spec. 3303, Great Lakes, Ill., \$800,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick and reinforced concrete consists of (6) Barracks, (1) Dispensary Barracks, Executive Office, Mess Hall, Garage, Power House, Laundry and Armory, ready roof, cement floors, steam heating, electric lighting, yellow pine floors, metal lath, roof ventilators, tin-clad doors, waterproofing. Owners taking bids due August 29 at 3 P. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Naval Auxiliary Reserve School, Spec. 3304, Naval Training Station, Great Lakes, Ill., \$700,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick and reinforced concrete, ready roof, cement and yellow pine floors, steam heating, electric lighting, metal lath, roof ventilators, tin-clad doors, waterproofing. Owners taking bids due August 29 at 3 P. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Temporary School, Winston-Salem, N. C. Architect, Charles Barton Keen, Bailey Building, Philadelphia. Owner, R. J. Reynolds, Winston-Salem, N. C. Stone, 1 story, 46x37 feet, shingle roof, electric lighting. Owner will build and is ready for sub-bids.

Naval Training Camp, Coddington Point, Newport, R. I., Spec. 3249. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Regimental Quartermaster's Building, Drill Hall, Mess Hall, Guards' Quarters, Regimental Office, Brigade Headquarters, Office Building, Dispensaries, Isolation Building, Swimming Pool, etc. Brick, reinforced concrete, hollow tile, ready, shingle and canvas roof, concrete, asphalt, mastic and yellow pine floors, metal

lath, galvanized steel skylights, roof ventilators, waterproofing. Lowest bid submitted by

Charles B. McGuire, Kurkshead Building, Providence, R. I., \$3,474,929.

MARYLAND Construction News

Red Cross Building, Union Station, Baltimore, Md. Architect, private plans. Owners, American Red Cross Society, 912 Keyser Building, Baltimore. Frame, 1 story. Plans in progress. Too early for details.

Housing Colony, Seven Pines, Va., \$3,000,000. Engineer, J. W. Alford, Industrial Housing Corporation, Washington, D. C. Project Engineers, Gannett, Seycie & Fleming, 204 Locust street, Harrisburg, Pa. Owners, U. S. Government, Industrial Housing Department, Washington, D. C. Will consist of 1,000 houses, sewage, lighting and plumbing systems. Plans in progress.

Marine Hospital (alts.), Baltimore, Md. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Treasury Department, Washington, D. C. New porches on 2 buildings and renovation of heating system in hospital. Owners taking bids, due August 30th. Singer-Pentz Co., J. L. Robinson Const. Co., Cogswell-Koether Co. and Geo. W. Bennett, all of Baltimore, Md., are figuring.

Ashtipmen's and Sand Building, Mt. Royal Yard, at North avenue, Baltimore, Md. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Brick, concrete, 1 story, asbestos roof, mill work, steam heating, electric lighting, steel

sash, metal doors, hollow metal skylights, ventilators, dampproofing, fireproofing, hollow tile, painting. Owners taking bids. Singer-Pentz Co., M. C. Davis, and D. M. Andrews, all of Baltimore, Md., are figuring.

Steel Plant Building, Sparrows Point, Md. Architect, private plans. Owners, Bethlehem Steel Co., South Bethlehem, Pa. Brick and reinforced concrete, 2 and 3 stories, 1150x272 feet, concrete and slag roof, electric lighting, steel sash, metal doors, hollow metal skylights, ventilators, fireproofing, dampproofing, hollow tile, elevators, ornamental iron work, plastering, metal lath, composition floors, painting, plumbing. Owners taking bids, due as soon as possible. Deverell-Spencer Co., Garrett Building, Baltimore, Md., are figuring.

Warehouses, Port Covington, Md., \$12,000,000. Architect, private plans. Owners, U. S. Government, War Department, Washington, D. C. Warehouses and Barracks. Work contemplated. Too early for details.

Chapel, Indian Head, Md. Architect, Percy A. Adams, Woodward Building, Baltimore. Owner, Rev. Mr. Sontag, care of Episcopal Church, Indian Head, Md. Hollow tile and stucco, slate roof, hot air heating, electric lighting, ventilators, dampproofing, tile and marble work, hardwood floors. Plans in progress.

MARYLAND Contracts Awarded

Building, Bank street and Central avenue, Baltimore, Md., \$110,000. Architect, C. A. Jackson, New York City. Owners, Baltimore Manufacturing Co., on premises. Reinforced concrete and steel, 3 stories, concrete roof, steam heating, electric lighting, steel sash, metal doors, hollow metal skylights, ventilators, fireproofing, hollow tile, composition floors, painting, plumbing. Contract awarded to Daniel S. Shepherd, Bank street and Central avenue, Baltimore.

Power Plant (add.), Westport, Md., \$350,000. Architect, private plans. Owners, Consolidated Gas, Electric Light and Power Co., Lexington Street Building, Baltimore. Reinforced concrete and steel, concrete roof, steam heating, electric lighting, steel sash, metal doors, hollow metal skylights, ventilators, hollow tile, plumbing. Owners are taking sub-bids.

Residences (7), Guilford avenue, between Thirty-first and Thirty-second streets, Baltimore, Md., \$21,400. Architect, Jacob F. Gerwig, 1028 North Fulton avenue, Baltimore. Owner, Edw. L. Storek, Munsey Building, Baltimore. Brick, 3 stories, 23x35 feet, tin and slag roofs, hot water heating, electric lighting. Owner will build.

Residences (8), 2201-15 Baker street, Baltimore, Md. Architect, D. Wessell, Baltimore,

Md. Owner, Geo. Klein, 4111 Frederick avenue, Baltimore, Md. Brick, 2 stories, tin roof, hot air heating, electric lighting. Owner will take sub-bids.

Shop, Scott and McHenry streets, Baltimore, Md. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore. Owners, Bartlett Hayward Co., Baltimore, Md. Brick and concrete, 1 story, 300x500 feet, slag roof, steel sash, metal doors, hollow metal skylights, ventilators, hollow tile. Contract awarded to Morrow Bros., Fidelity Building, Baltimore, Md.

Boiler Room, Woodberry, Md. Architect, J. Evans Sperry, Calvert Building, Baltimore, Md. Owners, Mt. Vernon-Woodberry Cotton Mill, on premises. Brick, 1 story, slate and slag roof, steam heating, electric lighting, steel sash, metal doors, hollow metal skylights, ventilators, fireproofing, plumbing, tile and terrazzo work, composition floors. Contract awarded to Gladfelter & Chambers, Thirty-sixth street and Roland avenue, Baltimore.

Residence, 3301 Powhatan avenue, Forest Park, Md. Architect, private plans. Owner, Joseph Goeller, 501 North Linwood avenue, Baltimore, Md. Frame, 2½ stories, 40x45 feet, slate roof, hot water heating, electric lighting, ventilators, tile work, composition and hardwood floors. Contract awarded to Murray

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& Haynes, Garrison and Duvall avenues, Baltimore.

Office and Storage Building, Columbia avenue and Putnam street, Baltimore, Md., \$19,000. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore. Owners, Bartlett,

Hayward Co., Scott and McHenry streets, Baltimore. Concrete foundations, frame, 1 story, 54x72 feet and 40x96 feet, slag roof, electric lighting, plumbing, heating. Contract awarded to Morrow Bros., Fidelity Building, Baltimore, Md.

nue. (C), H. W. Smith Company, 1606 Cherry street. 1 story shed, 30x46 feet.

Store and Dwelling, Sixtieth and Ludlow streets, \$2250. (O), Mutual Trust Co., Fourth and Chestnut streets. (C), Smith-Jardien Company, 1606 Cherry street. Alterations.

Store and Dwelling, 3255 North Sixth st., \$400. (O), Fred Berlinger, 2038 Hancock st. (C), Geo. Gessler Construction Co., Drexel Building. Brick alterations.

School, South street between Ninth and Tenth, \$500. (O), City of Philadelphia, Philadelphia. (C), Thompson & Bro., 105 North Fifth street. Brick alterations.

Dwelling, Parrish and Thirtieth streets, \$900. (O), K. Chirkeian, 2071 Ridge avenue. (C), Harry Denletian, Fifty-seventh and Vine streets. Brick alterations.

Machine Shop, 5805-7 Market street, \$1000. (O), Brinton Motor Truck Company on premises. (C), J. D. Fisher, 5427 Thompson street. Brick, 1 story, 16x20 feet, stone foundations, slag roof.

School, Price street, East of Cheltenham avenue, \$600. (O), St. Vincent Hall, East Price street. (C), Robert E. Lamb Company, 843 North Nineteenth street. Reinforced concrete floors. Boiler Room, Water and Mifflin streets, \$500. (O), Union Petroleum Company, Widener Building. (C), Robert E. Lamb Company, 843 North Nineteenth street. Alterations to roof.

Engine Room, Margaret and Trenton avenues, \$10,000. (O), Schwarz Wheel Company on premises. (C), P. M. Sax, Franklin Bank Building. Brick, 1 story, slag roof, 28x80 feet.

Dwelling, Sixtieth and Spruce streets, \$800. (O), Berman & Bro., 6014 Market street. (C), J. D. Fisher, 54424 Thompson street. Brick, 1 story, 1 x 14 feet, slag roof, stone foundations.

Shop, Thirty-eighth and Filbert streets, \$700. (O), Dunbar Auto Body Company, on premises. (C), J. D. Fisher, 5424 Thompson street.

Dwelling, 2161 East Cumberland street. (O), Chas. Burr on premises. (C), W. A. Faries, 2147 East Cumberland street. Second story, 11x11 feet.

Toilet Room, Broad and Spring Garden sts., \$5000. (O and C), Baldwin Locomotive Works, 500 North Broad street, second story, iron on iron, 23x23 feet.

Dwelling, 1023 Ellsworth street, \$625. (O), G. ermuti on premises. (C), John Diedatti, 840 Mountain street. Second story brick, 14 x 8 feet, stone foundations.

Store and Dwelling, 1234 South street, \$300. (O), B. Panstein on premises. (C), Sam. Rosenberg, 612 Tasket street. Present bulks.

Manufacturing Building, Twenty-second and Allegheny avenue, \$15,000. (O), Westmoreland Chemical Company on premises. (C), R. J. Whiteside Sons, 2125 Wallace street. Restore and repair fire damages.

Boiler Room, Richmond street north of Frankford avenue, \$300. (O), C. and H. Barnett, 1078 Frankford avenue. (C), Frank Achuff, 1600 North Front street. Brick alterations.

Dwelling, 324 South Seventeenth street, \$10,000. (O), Mrs. J. E. Beatty, Bryn Athyn,

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, 1900 Medary street, \$4000. (O and C), Wm. F. Clark, 1635 North Broad street. Brick, 3 stories, 15x51 feet, slag roof, hot water heating, stone foundations.

Repair Shop, 5506-08 Chestnut street, \$2500. (O), John H. Derr, Sixty-third and Market streets. (C), John F. Fallon, 449 South Sixtieth streets. Brick, 1 story, 32x41 feet, slag roof, stone foundations.

Shed, Morris street and Delaware River, \$75,000. (O), Baugh & Sons, 20 South Delaware avenue. (C), Chas. Stekhausen Co., Baltimore, Md. Timber Shed, 1 story, 100x255 feet.

Garage, Tioga and Brabany streets, \$18,000. (O), Dill & Collins, Sixth and Cherry streets. (C), Wm. Steele & Sons Company, Sixteenth and Parkway. Brick, 1 story, 55x74 feet, concrete foundations.

Laboratories, Wissinoming and Unruh sts., \$3000. (O and C), Disston & Sons, Inc., Tacony, Philadelphia. Brick, 1 story, 22x24 feet, concrete foundations, slag roof.

Garage, 1720-26 Callowhill street, \$11,700. (O), Geo. F. Pettinos, Real Estate Trust Building. (C), Solomon Bros., 263 South Eighth street. Brick, 1 story, 62x58 feet, slag roof, cement floor.

Storage Building, 22 and 24 Richmond st., \$9000. (O), H. and G. Barnett, 1078 Frankford avenue. (C), Frank Achuff, 1600 North Front street. Brick, 1 story, 32x34 feet, slag roof.

Garage, Sixth street and Olney avenue, \$300. (O), O. H. Townsend, 5512 North Fairhill street. (C), Chas. Townsend, 5512 North Fairhill street. Brick, 1 story, 27x16 feet, stone foundations, rubberoid roof.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Stock House, Poplar and West College avenue, \$200. (O), Robert Alo Brewing Co., Thirty-eighth and Girard avenue. (C), Chas. H. Cooper, Denckla Building. Alterations. Brick.

Mill Building, 5135 Wakefield street, \$5000. (O), Fiber Graphite Co., on premises. (C), Wm. F. Koelle & Co., Twenty-sixth and Oxford streets. Repair fire damages.

Garage, 3730 North Broad street, \$400. (O and C), Ford Motor Car Co., 2700 North Broad street. Brick alterations.

Store and Dwelling, 2947 Kensington avenue, \$400. (O), A. Nachtigel, 1641 North Seventh street. (C), Samuel Kopin, 1642 N. Seventh street. Brick alterations.

Foundry, Water and Mifflin streets. (O), Schom-Jackson Company on premises. (C), Sol Shestack, 322 Dickinson street. Brick, 1 story, 18x16 feet, stone foundations, slag roof.

Sunday School, Cheltenham and Germantown avenues, \$1200. (O), First Presbyterian Church on premises. (C), Samuel Hartung, 20 East Johnson street. Brick alterations.

Garage, 4723 Umbria street, \$300. (O), Tony Tony Flower on premises. (C), Mike Duva, 4100 Manayunk avenue. Brick, 1 story, 14x20 feet, slag roof, stone foundations.

Store, 260 South Fifth street, \$2000. (O and C), Louis E. Weiser, 623 South street. Repair fire damages.

Storage Building, 1938-40 Germantown avenue, \$1500. (O and C), C. Harry Rose, 1748 Frankford avenue. Brick alterations.

Pack Room, Kennedy and Richmond streets, \$11,000. (O and C), Chas. Lennig Company on premises. Brick, 1 story, 40x80 feet, concrete foundations, steel sash, slag roof.

Store and Dwelling, 210 South Fifty-second street, \$400. (O), C. A. Decker, 257 South Fifty-second street. (C), Louis Swerloff, 228 South Fifty-ninth street. Brick alterations.

Store and Dwelling, 4200 Ludlow street, \$500. (O), J. H. Hopple, Media, Pa. (C), C. Bierling, 3823 Baring street. Rebuild dangerous wall.

Shed, 1108 Shackamaxon street, \$600. (O), Otis Elevator Company, 1109 Frankford ave-

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Mont. Co., Pa. (C), Jos. Ashby, Fox Chase. Third story addition, 16x7 feet, plumbing, etc. Garage, 4008 Old York Road, #400. (O), Felin Bros., York Road and Butler street. (C), Jos. A. Fischer, 4437 North Ninth street. Brick alterations.

Pattern Shop, Twenty-first and Callowhill streets, \$3000. (O), Niles, Bement, Pond Co., on premises. (C), Henry E. Baton, 1713 Sanson street. Brick alterations.

Dwelling, 4995 Thomas avenue, #350. (O), P. Vagione on premises. (C), John DiSanti, 4913 Lancaster avenue. Second story, brick, 14x12 feet, stone foundations, slag roof.

Dwelling, 6402 Vine street, \$1000. (O), A. Finizie on premises. (C), Nicholas Nardy Co., 763 South Thirteenth street. Brick, 1 story, front, 14x10 feet.

Shop, 1411 Germantown avenue, #1800. (O and C), H. Donnelly, 1445 Howard street. Brick, 1 story, 25x32 feet.

Dwelling, Fifty-ninth street and City Line, \$1000. (O), Chas. P. Vaughn on premises. (C), A. E. James, Bala, Pa. Brick and stone, second story addition, 17x15 feet, stone foundations, slag roof.

Store and Dwelling, 3729 Lancaster avenue, \$1000. (O), A. Guenther on premises. (C),

A. E. Koenig, 4928 Parkside avenue. Brick interior alterations.

Restaurant, 12 North Sixtieth street, \$800. (O), E. Rudder, 12 North Sixtieth street. (C), H. D. Parson, 6006 Market street. Brick alterations.

Garage, 1351 Ridge avenue, \$1500. (O and C), Chas. Kerbeck on premises. Brick alterations.

Fire Tower, 1737 North Randolph street, \$300. (O), McNeely Company on premises. (C), Carter Paving Company, 641 North Eighteenth street.

Manufacturing Building, Front and Laurel streets, #600. (O), Sisson Estate, 71 Laurel street. (C), Chas. F. Baxter, Merchantville, N. J. Concrete foundations for boiler settings.

Dryhouse, Lexington avenue and Kurr st., \$150. (O), Wm. F. Spink on premises. (C), Wm. H. Eddleman & Sons, 453 Green Lane, Roxborough. Roof, 30x44 feet.

Store and Dwelling, 1636 South Sixth st., \$700. (O), Thos. McCormick on premises. (C), M. Di Searno, 928 Tasker street. Alterations.

Dwelling, 5455 Cedar avenue, \$1000. (O and C), C. Clark on premises. Second story brick addition, 16x16 feet, stone foundations.

ings in the cantonments are 120 by 40 feet, while those in smaller camps are 93 by 40 feet. Special attention has been given to adequate facilities for heating, ventilation and light, and many features are now being added to make these quiet, restful buildings more attractive and inviting than would be expected in the usual camp equipment. Some of the buildings have spacious, open fireplaces built into inviting nooks. Others have closed porches, and are all equipped with fire extinguishers, drinking fountains and running water.

The interior is a large reading room, with two bedrooms at one end for housing the library staff. Trained librarians are in charge. All of the shelves are open for inspection and contain from 10,000 to 20,000 volumes. Each building has a comfortable seating capacity for about 200 readers. In the library building is housed the main supply of books for the camp, and from it branches are maintained in the barracks, the mess halls, Y. M. C. A. and K. of C. buildings.

Each of the sixteen National Army cantonments has been provided by the Commissions on Training Camp Activities with a Liberty Theatre building having a seating capacity of 3000 and a stage accommodating the scenery for "Broadway" productions. The buildings are furnished with footlights, dressing rooms, and scenery for an ordinary production. There is also an orchestra pit, where regimental bands play at every performance.

Nine theatres of a smaller type have been completed in the National Guard camps and others are in course of construction. The approximate size of the larger cantonment theatres is 179 by 120 feet, with a seating capacity of from 2500 to 3000. The stages in these theatres are 60 by 32 feet and the floor of the house 132 by 120 feet. The National Guard camp theatres have a seating capacity of 1000; the building being 60 by 120 feet and the stage 22 by 40 feet. The house floors are approximately 90 by 60 feet.

Each theatre has five entrances and fifteen exits and is so constructed as to be easily emptied in case of fire. Much of the work of constructing these theatres has been carried on by the many electricians, scene painters and other expert mechanics who were discovered in the camps. Chautauqua tents are used for shows in the smaller camps, where regular dramatic productions, vaudeville and movies are provided by the Government for the men.

The Knights of Columbus have erected, so far, in the camps three styles of buildings. Like the Y. M. C. A., they furnish a main or auditorium building in each of the sixteen National Army cantonments. This is of squat construction, with a front elevation in Spanish design, and is 60 by 100 feet. There is a main entrance at one end of the building and two entrances on each side,

SEMI-MILITARY BUILDINGS IN THE NATIONAL ARMY CANTONMENTS

By Robert H. Moulton

The War and the Navy Departments Commissions on Training Camp Activities were created at the beginning of the war to supply our young men everywhere in training with the normalities of life. Mr. Raymond B. Fosdick, chairman of these twin commissions, wished to accomplish this by creating as little new machinery as possible. Therefore, the Young Men's Christian Association, the Knights of Columbus, the Jewish Welfare Board, the American Library Association, and all such already existing organizations, were called upon to lend their co-operation. The Young Women's Christian Association came into the camps later with that unique institution, the Hostess House. This house was designed primarily to take care of women visitors to the camps and furnish a place of meeting between them and the men.

The commissions were determined to cover the whole ground in furnishing recreational and educational facilities for the soldiers and sailors. Wherever there seemed to be a gap that no existing agency was particularly prepared to fill, the commissions supplied the need direct. In this way the Liberty Theatres were furnished, meeting the problem of a place to go to and be entertained in the evenings. The Post Exchange, or soldiers' co-operative stores, were similarly started in the sixteen National Army camps, and furnish a place where the men may spend their money. Everything is on sale there, from a shoestring to a pink valentine and from an ice cream soda to a song book of the kind

that the men use when they gather together by the thousands for mass singing. Club life in the camps is furnished through the Y. M. C. A., the K. of C., and, in a few camps, the Jewish Welfare buildings. Here men may read, write, loaf and smoke, listen to music and write letters home; and in the auditorium of each building entertainments of all sorts are held. Camp talent musicales, athletic stunts and imported entertainment programs all take place here, in addition to those given in the larger Y. M. C. A. auditorium in each camp and in the Liberty Theatres. The Hostess House furnishes the home life of the camp and has come to be popular with the men in the evenings during all the week. With the library to furnish him with plenty of good reading matter and a quiet place to read in, and the Post Exchange playing the role of country store or corner drug store, the men's needs are pretty thoroughly taken care of. Thirty-six library buildings have already been completed in the military camps of the country, and others are under way. These buildings are made possible through a special grant from the Carnegie Corporation of \$320,000, supplemented with other funds.

The type of building chosen is new in the library world, and will be of interest to those who are concerned with camp building designing. They are wooden structures of rather plain design, similar to the usual type found in modern camps. They were designed by Edward L. Tilton of New York City, who contributed his services. Most of the build-

with plenty of windows to furnish light and air. Each building has an altar and a chaplain's and secretary's room in one end, and other offices in the other end. In each cantonment there are also two smaller club buildings 40 by 100 feet, with a ten-foot porch running the length of the building on one side. The interior arrangement is the same as in the main building and only differs from the latter in that there is a monitor through the middle of the building, affording the maximum light and air. This type of building has also been erected in all of the National Guard camps.

Portable buildings are also being put into use by the K. of C., of the same style and arrangement as the club buildings, with porches over the entrances on one side, and resembling a country club or bungalow. These are of special value in case of a temporary camp or of a camp being moved. Each building is equipped with room heaters, player pianos and music rolls, chairs, tables, desks, stationery, books, magazines, athletic equipment, etc. One hundred and eight of these different buildings have been put in operation in army camps and marine and naval stations.

The Hostess House is a large brown, bungalow-like building set near the entrance to the camp, and stands out distinctly against the background of unpainted army buildings.

Of the \$5,000,000 Y. W. C. A. war fund, \$1,350,000 was appropriated as an initial fund in starting the Hostess House work. Seventy of these buildings are already in operation. Some of the larger cantonments have two, or even three where the number of negro troops makes one seem advisable for colored women. Women architects have had entire charge of the plans for the Hostess Houses. While these houses vary somewhat in size and detail according to the local demands, in general structure and style they are similar. The utmost degree of attractiveness in keeping with camp life has been attained both inside and outside these buildings. Each one has a large chimney in the middle of the big living room, with great double fireplaces. There is a parcel checking room, a rest room for women, out of which opens a fully-equipped nursery; and the back of the building houses a cafeteria, where attractive meals are served. The buildings are electric-lighted, and steam-heated, as are also the sun parlors, which usually extend across two sides of the house. The second floor of the larger buildings contains not only the bedrooms of the resident hostesses and staffs, but emergency sleeping quarters for women stranded in camp.

The Y. M. C. A. has been on the ground from the first. Before the camps were entirely completed, the Y. M. C. A. workers had their headquarters established in tents and were present with a welcome to the incoming recruits. They dispensed information and good cheer; in fact, one of them accom-

panied each of the incoming troop trains, going from car to car, addressing the men informally, telling them what the Y. M. C. A. stood for in camp. The Y. M. C. A. operates 178 army and navy stations at present. At the largest of these there are fourteen buildings, with a large force of secretaries and other officials.

The new standard service or so-called type "E" Y. M. C. A. building is an interesting architectural achievement. It is the last word in utility, compactness, economy of space, material and money, efficiency and adaptability to a multitude of dissimilar uses. The problem was to find buildings that would be "all things to all men" in the cantonments. The demand was for some sort of structure that would simultaneously be home, club, church, schoolhouse and entertainment centre for the men in the ranks, a place where the whole varied army Y. M. C. A. program could be going on at one time without any phase seriously interfering with other phases of the work; where there would be facilities for the movies, the lectures, or the religious talk, and where at the same time the man who wanted to write home, buy a stamp or a money order, wrap up a package, borrow a book or a magazine, play a game of checkers or chess, enjoy a chat with his chum or a heart-to-heart talk with the secretary could do so.

The type "E" building—with its modification, the type "F" building in use in National Guard camps—is the solution of the problem. Only a visit to one of these great camp centres, however, can give an adequate idea of how admirably it fulfills its purpose. The six to eleven single-story Y. M. C. A. buildings are easily distinguishable by their dark green coat of stain from the bare and unpainted barracks that flank them. Numerous broad windows in the sides and double dormer windows in the roof flood the interior with sunshine, and doors placed at convenient intervals afford ready access. Alongside and parallel to the large wing snuggles a smaller one, connected to the larger by a broad passageway.

Once inside of the building, it is seen that the larger wing is the auditorium, the smaller the social hall. In the former are permanent benches, a stage at the far end with a piano on it and a moving picture screen. Shelf-desks for writing run all around the walls and two long hinged shelves, one in the middle of each half of the auditorium, are ingeniously fastened to the posts that support the roof and may be raised for writing or lowered when the room is to be used for any gathering.

At the end of the smaller wing farthest from the desk (which is located in the connecting passageway) a huge stone or brick fireplace lends a cheerful, homelike atmosphere. The ubiquitous shelf-desks on the walls for writing here, too, are on all sides,

but the space in the centre for the long room is frequently full of comfortable chairs donated by forethoughtful friends. The rocking-chairs are often the only ones to be found in camp; settees, too, and great armchairs help the soldier to forget for a time how long it has been since he said good-bye to the formerly unappreciated furniture comforts of civilian life.

The daylight hours, when the men for the most part are drilling, are a good time to find the secretaries "at home." Home to them means a small, bare bedroom at one side or other of the stage or at the opposite end of the auditorium back of and to the side of the desk. At this end, too, from amidst the secretaries' quarters, a narrow stairway leads to an upper room, the most of which is usurped by a huge movie projector booth. The space that remains on either side of this booth is delegated as sleeping quarters to two assistant secretaries. Other rooms at this end of the auditorium provide classroom, storage and office facilities.

(Continued Next Week)

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Reserve for Sundries	-	160,000.00
Surplus	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	\$ 12,317,502.26
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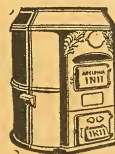
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September 4, 1918

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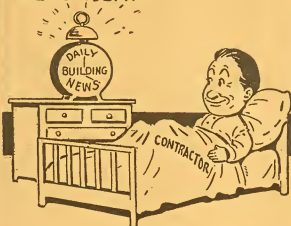


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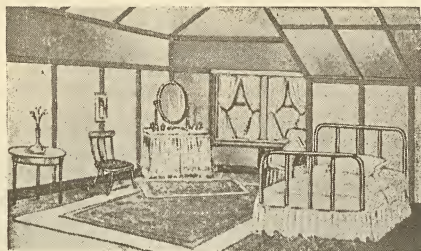
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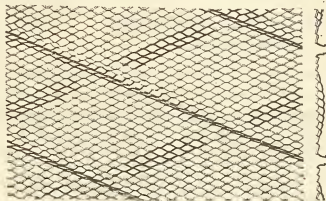
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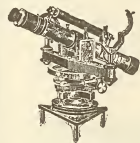
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VOLUME XXXIII
Number 36

PHILADELPHIA
September 4, 1918

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NO one can live in America to-day and be ignorant of the slogan, "Food Will Win the War," and because of our belief in this assertion, our sugarless coffee and wheatless bread and meatless meals become endurable.

The importance of food brings us to consideration of the food producer—the farmer and his farm. What about the farmer's housing conditions? What about those of his co-workers—the livestock? The importance of the farm and its products is not only supreme now, but will continue to be so after the war, with convalescents and invalids returned to the country and the devastated countries still to be supplied in great measure.

That the value of farm products is increasing is shown by the statistics for 1916 and 1917. In 1916 the total value of farm products was \$13,449,000,000, and in 1917, \$19,443,840,000, an increase of \$5,994,000,000 in one year.

The first consideration, then, is the farmer's house. Regarding this Mr. Max Eugene Cook, Farmstead Engineer for the California State Land Settlement Board, Durham, Cal., in the *Architect and Engineer* says:

"First and foremost, the plan for the farm house must be flexible to permit of future additions and improvements; a great many of which can be made by the farmer himself. It is only through intelligent planning at the outset that such additions and improvements may be added from time to time with an ultimate result that is successful, both from an

architectural as well as a utilitarian standpoint.

The plan best adapted to the individual farmer's requirements cannot be found; it must be made. This requires a trained mind; one that is not only schooled in the peculiar requirements of the farm house, but with the farmer's interests at heart as well, and a desire to co-operate with him in evolving a result that will fulfill his special conditions and express, as a home should, the individuality of himself and family.

Nothing should induce the farmer to select a plan that is ready-made. It may appear to suit his pocketbook and be otherwise satisfactory, but in the end is certain to prove inadequate in many ways, as well as uneconomical. Ready-made plans, if they have been carefully worked out, are valuable only for their suggestions. Otherwise they are a detriment.

The selection of a farm house from one of the widely advertised "Plan Books," issued for the purpose of increasing sales of materials, is a more serious mistake. Possibly those who are responsible for the issuance of some of these publications are trying honestly to give the farmer what he needs, but the fact remains that most of the plans are but unintelligently designed and poorly planned suburban houses. There is a marked difference between a suburban house and one suitable for the farm.

A house must not only look well but must first be practical and livable, particularly on the farm where it is to be a real home, and the center of business activi-

ties as well. The well designed and convenient farm house costs no more than an architectural misfortune and in fact, ultimately, costs less beyond estimate. If capital is limited in the beginning, the house should be planned so that a portion of it may be built as a nucleus of what is to follow. The farmer may then add to it as he is able, and as required, always having in mind the ultimate possession of a worthy home.

A suitable farm house is the safest of investments, the returns on which can be measured and experienced, not alone in dollars and cents, but as a social investment, and, as insurance against discouragement, an outlook of dreariness and a life of drudgery. Surely the farmer is entitled to the conveniences in the home equal in comfort to those of the city dweller. His children should be able to choose their vocation without weighing the relative attractions between city and country home life.

The farm house problem, although intensely interesting, is a difficult one when handled conscientiously. The intelligent laying out of the farmstead as a whole is equally engrossing. One should not be considered without the other. Some of the controlling factors in the laying out of the farmstead are: Accessibility to fields and roads; economical distribution of roads and tillable land; elevation, drainage and water supply; general convenience; prevailing winds, with house free from dusty roads and barn yard odors; proper sunlight exposures in all rooms and buildings; direction of the

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town, school and community centers; and existence of healthful conditions and pleasing outlook.

In brief form, the following include a very few of the more important considerations that demand attention in the planning of the farm house:

The kitchen is the center of activities. "Three square meals," being the order of the day on a farm, necessitates the most careful consideration to kitchen convenience. It is a mistaken belief by some, that a model kitchen can be evolved and standardized like a piece of machinery. Here, more than elsewhere, individual requirements must be given the most careful attention. The possibilities for attainment in space and labor saving arrangement of plan have yet to be commonly understood.

The kitchen, in particular, should not be used as a thoroughfare to other rooms.

Dining porch and dining room should be equally accessible for serving from the kitchen.

Larger food storage spaces, convenient to the kitchen, are required for the country house than for city or suburban dwellings.

Kitchen screen porches must have practical value and not be mere "pocket handkerchiefs" in size.

The kitchen should have an outlook commanding a view of the main road, driveway and farm buildings.

Light, ventilation and freedom from excessive summer heat are essential.

Dining room or porch should be accessible to men without passing through the kitchen, or other main rooms of the house.

The various porches should be so designed as to permit of putting them to more than one use in case of emergency. (Either as sleeping porches, dining porches, living porches, or, by the addition of sash, as separate rooms.)

The bath room should be accessible to all rooms without going through bed rooms and from the exterior without entering the house proper.

It is a mistake to sacrifice great convenience for the sake of centralizing plumbing fixtures. The extra initial cost of separating bath room and kitchen is generally much exaggerated.

Ready made plans are merely suggestive. They are made to meet imaginary conditions. The natural controlling factors peculiar to any given building site, and the requirements of the farmer and his family, vary in each individual case and are anything but imaginary.

Of great assistance, too, are proper housing facilities for livestock and farm implements and products.

The State of Indiana has organized a silo building campaign and many reasons

are advanced for the advantages of the silo, such as:

1. More feed can be stored in a given space in the form of silage than in the form of fodder or hay.

2. Corn silage is a better feed than corn fodder.

3. Silage is the cheapest and best form in which a succulent feed can be provided for winter use, and a number of other reasons.

The farmer is also urged to erect implement sheds for tractors and other labor saving devices.

As for the livestock, clean, sanitary living quarters affect their efficiency as they do the efficiency of humans, and one very small but interesting item is that of drinking cups, for dairy records show that these may increase the milk flow 10 per cent.

Surely, then, hand-in-hand with industrial housing goes farm housing, and we may well place farm building in all its ramifications in the class of essential building.

ARCHITECT MUST MEET CHANGED CONDITIONS

It will soon be evident to all that the way things were done "before the war" have very little relation to things as they are now done or as will be carried out later on.

In Government departments in Washington are some placards reading, "Forget how things were done before we entered the war." To-day there are undreamt of changes in methods and direction of ideas. Architects, contractors and material men already realize that there is much that should be forgotten as to how things were done in the building industry before the war.

The problem of the architect is to so direct his work as to best meet the changing conditions and modes. It is a day when more and more one hears the words "non-essentials" and "essentials." This has a bearing on present-day architecture and must have even a stronger one on the future.

In construction the importance of essentials, for safety, durability, economies, has always been recognized; but along with it went a care-free attitude towards the inclusion of non-essentials—and in this latter may be found a basic error which a better architect and better buildings may be freed from.

A combination of the purely utilitarian with the intangible something represented by the necessity in human beings to produce impressions over and beyond the purely needful, made the practice of architecture one of the most arduous professions, and likewise the builder and contractor fared in its hardships. The two elements are almost irreconcilable as now fused in architectural design and execution, and it is toward a development wherein the practical and the artistic will be mixed in different proportions, or be leavened by the

injection of another as yet untold element, that we may hope to see a readjustment of design in accordance with the newer ideas generated by the great war.

The tendency is likely to be one that will bring design and construction more into harmony, the former becoming a true expression of function and materials, instead of as in about nine cases in ten before the war the design was simply stage scenery, camouflaging arbitrarily, as suited the architect's fancy, the real thing underlying it. Such a condition, remarks the "Building Review," could not but create a biased feeling in the minds of all concerned—owner, architect, contractor, and it will be well for all henceforth to "forget how things were done before the war," in matters of detail at least.—"Architect and Engineer."

BUILDING CURTAILMENT LESSENS LUMBER PRODUCTION

A total computed lumber cut for the United States in 1917 of 35,831,239,000 feet is announced by the Forest Service. This figure is based on reports received up to May 15 from 16,408 sawmills out of the 24,815 believed to have operated last year. It is estimated that the actual cut in 1917, on the basis of compiled figures, was approximately 10 per cent. less than the production in 1916.

The falling off in lumber production during the past year is attributed principally to largely decreased private building operations, the scarcity of labor in connection with small operations, transportation difficulties, curtailment of demand on the part of wood-using industries, and a more or less general dislocation of lumber distribution through ordinary channels of trade. A considerable portion of the total quantity produced was utilized in meeting the exceptional demands for Government construction and other war emergency projects, including ship material.

The State of Washington was again the largest producer, with a lumber cut of 4,570,000,000 feet; Louisiana was second, with 4,210,000,000 feet, and Oregon third, with 2,585,000,000 feet, crowding into the fourth position Mississippi, with a cut of 2,425,000,000 feet.

Southern yellow pine, with a total of 13,539,464,000 feet, forms 37.7 per cent. of the total cut. Douglas fir, its nearest competitor, is credited with 5,585,000,000 feet. White oak and white pine are accredited with 2,250,000,000 feet.

The number of mills in operation reporting in 1917 was smaller than for the two preceding years.

A comparison of the computed cut for 1917 with the total cut of the previous year in the larger producing regions shows a decrease of about 10 per cent. in the southern yellow pine group of States, a decrease of 23 per cent. in the North Carolina pine group, and a decrease of 11 per cent. in the Lake States. On the other hand, there was an increase in production of 3 per cent. in Oregon and Washington.—Ex.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residences (576), Oregon avenue tract, Philadelphia. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corporation, 613 G street, N. W., Washington, D. C. Stone and brick, reinforced concrete foundations, cement floors, crushed slate, asphalt shingles and composition roof, cement floors, warm air heating, steam heating, electric wiring, skylights, iron fences and posts. Owners taking bids, due September 6th. Cramp & Co., Denekla Building; Warren-Moore Co., Colonial Trust Building; Pomeroy Const. Co., 1609 Ransstead street; Henry P. Schneider, 3713 Old York Road; Moss-Taylor & Crawford, Fifty-eighth and Girard avenue, and Roydhouse-Arcy Co., 112 North Broad street, are figuring.

Signal Towers (2), Battery Houses (2), Erie avenue yard, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal. Concrete, brick and steel, terra cotta coping. Towers, 2 stories, 17x22 feet; Office, 17x26 feet and 17x21 feet; Battery Houses, 1 story, 10½x19½ feet and 10½x17½ feet, asbestos and slate roof, cement and yellow pine floors, dampproofing, steel doors and partitions, hot water heating, electric wiring. Owners taking bids. F. W. Van Loon, Denekla Building; Pringle Borthwick, 8018 Germantown avenue; Charles C. Pace, Merion, Pa.; A. L. Carhart, Penfield Building; Roydhouse-Arcy Co., 112 North Broad street; Thomas C. Truett, 1613 Sansom street; Chas. McCaull Co., 1713 Sansom street; H. E. Batton, 1713 Sansom street; Mitchell Bros., 2125 Race street, and F. A. Havens Co., 845 North Nineteenth street, are figuring.

Garage, Bailey and Cambria streets, Philadelphia. Architect, R. H. Pepper, 1808 North Seventh street, Philadelphia. Owner, Charles E. Seese, on premises. Brick, 1 story, 21x9½ feet, slag roof, cement floor, mill work, ornamental iron work. Architect is taking bids. Thos. J. Carberry, Heed Building, is figuring.

Residences (22), Lebanon avenue, Marlyn road and Sixty-fourth street, \$103,800. Architect, Bart Tourison, Land Title Building, Philadelphia. Owner, John McGinty, 2010 North Broad street, Philadelphia. Brick and stone, 2 stories, 16x42 feet and 16x32 feet, slag roof, hot water heating, electric lighting, hardwood floors. Owner will build.

Bank (add.), 1006 West Lehigh avenue, Philadelphia. Architect, Wm. H. Wooters, 816 West Allegheny avenue, Philadelphia. Owners, Excelsior Trust and Saving Fund Co., care of Samuel C. Abernethy, 2724 North Fifth street, Philadelphia. Brick, 2 stories, 20x25 feet, mansard slag roof, stone foundations (heating and lighting reserved), yellow pine floors, iron work. Owners taking bids, due September 4th. H. H. Wehmer, 509 W. Cumberland street; Thos. M. Seeds, Jr., Co., 1207 Race street, and Harry P. Werner, 3245

Germantown avenue, additional bidders.

Store Building (alts.), 1017 Market street, Philadelphia. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, I. Press & Son, 809 Chestnut street, Philadelphia. General alterations. Plans about completed. Architect will take bids in a few days.

Residence, City Line and Limekiln Pike, Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Harry Keummerle, Morris Building, Philadelphia. Stone, 3 stories, 30x42 feet, 2 14 feet cement porches, stone foundations, slate or shingle roof, hardwood floors, hot water heating, electric lighting, tile and marble work. Plans about completed. Owner will be ready for sub-bids in one week.

Repair Shop (alts.), Twelfth and Reed streets, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Department of Public Works, 215 City Hall. General repairs, cement floors, steam heating, electric lighting, plumbing. Architect taking bids, due September 4.

Monaghan & Losse, Inc., 3016 Chestnut street; Mitchell Bros., 2125 Race street; E. C. Durell, 1713 North Twenty-fourth street; F. A. Havens Co., 845 North Nineteenth street, and George Dobbins, 4200 Chester avenue, are figuring.

Fire Tower (add.), Training School, Seventh above Norris street, Philadelphia. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, care of Department of Public Safety, City Hall. Frame, 10x10 feet, 20 feet high, tin roof. Plans in progress.

Utilities, Oregon avenue tract, Philadelphia. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, N. W., Washington, D. C. Consists of grading, paving, cement walks, curbing, sodding, sewage system, etc. Owners taking bids, due September 6th. Roydhouse-Arcy Co., Fidelity Building, and Warren-Moore Co., Colonial Trust Building, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Building (alts.), 422 Walnut street, Philadelphia. Architect, Wm. C. Furber, 418 Walnut street, Philadelphia. Owners, Wagner Taylor Edison Co., Inc., 422 Walnut street. Interior alterations to second floor. Contract awarded to Frank G. English, 1610 North Carlisle street.

Garage, 748 South Swanson street, Philadelphia. Architect, Charles E. Oelschlagel, 1615 Walnut street, Philadelphia. Owner, James Gallagher, Inc., 810 South Swanson street, Philadelphia. Brick, 1 story, 33x160 feet, slag roof, stone foundations, steam heating, electric lighting, cement floors, hollow metal skylights (gasoline storage system reserved). Contract awarded to E. J. Kreitzburg, 1345 Arch street, Philadelphia.

Submarine Battery Storage Building, Spec. 3253, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, hollow tile or wood, 1 story, 341x90 feet, concrete foundations, ready roofing, mastic or cement floors, steam heating, electric lighting, rolled steel sash, metal covered doors, waterproofing. Contract awarded to Turner Concrete Steel Co., 1713 Sansom street, \$129,750; time, 90 days.

Garage, 1718-20-22 Wood street, Philadelphia, \$7,000. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owner, Jas.

Browne, 140 North Seventeenth street, Philadelphia. Brick, 1 story, 45x42 feet, slag roof, cement floors, heating, plumbing. Contract awarded to Solomon Bros., 263 South Eighth street, Philadelphia.

Shed, Buckins and Allen streets, Philadelphia, \$10,000. Architect, private plans. Owners, Henry A. Hiter & Sons, on premises. Frame, 1 story, 50x400 feet, slag roof. Contract awarded to Harry Brooklehurst, 512 W. Norris street.

Store Building (alts.), 1019-21 Market street, Philadelphia, \$17,000. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Samuel Sternberger, Tenth and Filbert streets, Philadelphia. Brick and mill construction, 5 stories, carpentry and mill work, plastering, slag roof, hardwood floors, painting, glazing, iron work (cedar or cypress tank, 10,000 gallon capacity) and necessary foundations. Contract awarded to B. Bornstein, 1510 North Franklin street, Philadelphia.

Machine Shop, Front and Richmond streets, Philadelphia, \$5,000. Architect, private plans. Owners, G. & H. Barnett, 1078 Frankford avenue, Philadelphia. Brick, 1 story, 35x46 feet, slag roof, cement floor, electric lighting. Contract awarded to Frank Achuff, 1600 North Front street, Philadelphia.

Garage, 2924-26 Rath street, Philadelphia, \$3,000. Architect, private plans. Owner, C. Brugatis, 3029 Kensington avenue, Philadel-

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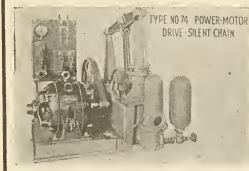
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Pennsylvania Building, Phila.

phia. Brick, 1 story addition, 30x37 feet, slag roof, cement floor. Contract awarded to Roland Ball, 3128 Reach street, Philadelphia.

Saw Room Building and Dry Kiln, Fortyninth and Botanic avenue, \$14,500. Architect, private plans. Owners, George W. Smith Co., on premises. Brick and timber, 1 story, 28x96 feet and 34x146 feet, slag roof. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Office Building, southeast corner of Morris and Brambrey streets, \$30,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Lutz Co., Inc., 2514 Morris street, Philadelphia. Brick and concrete, 3

stories and basement, 55x40 feet, stone foundations, slag roof, maple, cement and tile floors, electric lighting, fire and kalamein doors, roof ventilators (heating, gas piping and electric wiring reserved). Contract awarded to Frank L. Wintz, 1618 North Twenty-seventh street, Philadelphia.

Building for Flasks and Accumulators, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, Navy Department, Washington, D. C. Concrete, 1 story, 15x18x30 feet, slag roof, electric lighting. Contract awarded to Hughes-Poultred Co., Commonwealth Building, Philadelphia, \$3,400.

dent, Tenth and Chestnut streets, Philadelphia. Brick and stucco, 1½ stories, 30x35 feet, slate roof, pine floors, hot air heating, electric lighting. Contract awarded to Dodson Realty Corp., Bethlehem, Pa.

Morgue and Storage Shed, Gethsemane Cemetery, Reading, Pa. Architects, Muhlenberg Bros., Second National Bank Building, Reading, Pa. Owner, Rt. Rev. J. Bornemann, St. Paul's R. C. Church, Ninth and Walnut streets, Reading, Pa. Concrete foundations, steel and cast iron, 2 floors and tank, 68x14 feet, surfaced roofing, cement floors. Contract awarded to H. J. Randenbush, Reading, Pa.

PENNSYLVANIA Contracts Awarded

Apple Storage House, Orland, Pa., \$15,000. Architects, Stewardson & Page, 316 Walnut street, Philadelphia. Owner, A. C. Harrison, Drexel Building, Philadelphia. Stone, 2 stories, 80x33 feet, asbestos shingle roof, stone foundations, reinforced concrete floor. Contract awarded to W. John Stevens, Inc., Wynote, Pa.

Theatre (rebuilding), Eighth and Penn streets, Reading, \$35,000. Architects, Hoffman & Co., Finance Building, Philadelphia. Owners, Berks Amusement Co., care of Vincent & Wilmer, Commercial Trust Building, 1451 Broadway, New York City. Brick, 2 stories, general interior and exterior alterations, steam heating. Contract awarded to Sharp Const. Co., Reading, Pa.

Engine Facilities, Shire Oakes, near Pittsburgh, Pa., \$60,000. Architect, A. C. Shand, Broad Street Station, Philadelphia. Owners, Pennsylvania Railroad Co., care of A. C. Shand, Broad Street Station. Concrete, 6 stalls, 120 feet long, slag roof, concrete foundations, electric lighting, rolled steel sash, con-

crete floors. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

Office Rooms and Store, 317 Market street, Chester, Pa., \$4,000. Architect, private plans. Owner, E. B. McClenachan, 318 Market street, Chester, Pa. Brick and frame, 2 stories, plate glass and plumbing. Contract awarded to R. H. Seroggins, Chester, Pa., who is taking sub-bids.

Store Building and Boarding House, Kaska Williams, Pa. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh Coal and Navigation Co., care of S. D. Warriner, President, Tenth and Chestnut streets, Philadelphia. Brick and stucco, 1½ stories, 30x50 feet, slate roof, pine floors, hollow tile, hot air heating, electric lighting. Contract awarded to Dodson Realty Corp., Bethlehem, Pa.

Residence, Kaska Williams, Pa. Architect, George S. Welsh, Coal Exchange Building, Wilkes-Barre, Pa. Owners, Lehigh Coal and Navigation Co., care of S. D. Warriner, Presi-

The annual report of the United States League of Local Building and Loan Associations shows that Ohio leads with a total of 767,100 members. Pennsylvania comes second with 677,911 members.

At the recent 26th annual convention at Newark, N. J., Secretary H. F. Collarius in his annual statement to the League says in part:

"The unsettled financial conditions created by the world war have not materially interfered with the growth or prosperity of the building and loan associations of the United States. While the business of these associations was for a time disarranged in some localities, they nevertheless advanced money freely during the year for home building purposes, promptly paid their withdrawing members, took an active part in the Liberty Bonds, War Savings Certificates and Thrift Stamp campaigns and invested liberally in all these issues.

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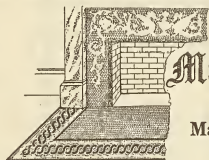
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NEW JERSEY Construction News

Seaplane Storage Building, Gloucester, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Pars, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, concrete and steel. Plans in progress. Owners will advertise for bids.

Fire House, near Haddon Village, N. J., \$30,000. Architect, George W. Johnson, City Hall, Camden, N. J. Owners, City of Camden, care of George Bender, City Hall, Camden, N. J. Brick, 2 stories, 48x70 feet, slag roof, stone foundations, steam heating, electric lighting, pine floors, gasoline storage system. Plans about completed.

Factory, Twenty-fourth and Hayes streets, Camden, N. J. Architect, private plans. Owners, R. H. Beaumont Co., Inc., Drexel Building, Philadelphia. Brick, slow burning construction, 1 story, 50x200 feet, slag roof, concrete foundation, electric lighting, rolled steel skylights, roof ventilators, sheet metal work.

Hockett Const. Co., 525 Market street, Camden, N. J., are taking sub-bids on all lines.

Office, Yorkship Yard, Camden, N. J., \$2,000. Architect, private plans. Owners, Public Service Office Building, Camden, N. J. Frame, 1 story, 14x32 feet, concrete foundations, slate roof, wood floor, electric lighting, plumbing. Owners taking bids. Hockett Const. Co., 525 Market street, Camden, N. J., is figuring.

Office, Gloucester, N. J., \$2,000. Architect, private plans. Owners, Pusey & Jones, Gloucester, N. J. Frame, 1 story, 14x32 feet, slate roof, concrete foundations, electric lighting, wood floors, plumbing. Owners taking bids. Hockett Const. Co., 525 Market street, Camden, N. J., is figuring.

Manufacturing Building (alts. and add.), Federal street, Camden, N. J. Architect, H. P. Friend, Arcade Building, Norristown, Pa. Owners, Dobbins Soap Manufacturing Co., on premises. General alterations and addition, new partitions, etc. Architect will build.

DELAWARE Construction News

Garage, Pennsylvania and Brinkle avenue, Wilmington, Del. Architects, Brown & White-side, Ford Building, Wilmington, Del. Owner, Wm. France, 2303 Delaware avenue, Wilmington, Del. Stone, 2 stories, 30x45 feet, slate roof, concrete floors, stone foundations, vapor heating, electric lighting, gasoline storage system. Plans in progress.

Garage, Delaware avenue and Tatnall street, Wilmington, Del. Architects, Brown & White-side, Ford Building, Wilmington, Del. Owners, Wilmington Auto Co., Wilmington, Del. Brick and concrete, 3 stories, concrete foundations, slag roof, steam heating, electric lighting, cement floors, terrazzo work. Architect has received bids.

Store and Residence (alts.), Seventh and Market streets, Wilmington, Del. Architect, J. H. Thompson, Ford Building, Wilmington,

Del. Owner, Max Kiel, 300 East Fourth street, Wilmington, Del. Brick, 3 stories (heating and lighting reserved), tile and marble work, pine floors (will change into 6 apartments). Architect taking bids, due September 4th. Chas. J. Dougherty, John Healy & Sons, Reed & Bros. Co., Harry Carlon, and Tindall & Son, all of Wilmington, Del., are figuring.

Garage, Tenth and French streets, Wilmington, Del., \$95,000. Architect, W. E. Hance, 204 West Twenty-fourth street, Wilmington, Del. Owner, Dr. S. G. Elbert, 101 French street, Wilmington, Del. Concrete, 3 stories, 112x109 feet, reinforced concrete roof, steam heating, electric lighting, concrete foundations. Contract awarded to Concrete Const. Co., Wilmington, Del.

Hut, French street, Wilmington, Del., \$2,481. Architect, private plans. Owners, Y. M. C. A.,

ARTESIAN WELLS DRILLED



Test Borings
Soundings

JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.

Wilmington, Del. Frame, 1 story, 23x40 feet, rubberoid roof, stove heating. Contract awarded to Wm. D. Haddock, Wilmington, Del.

Apartment House and Store (alts.), Delaware and Tatnall avenues, Wilmington, Del. Architect, private plans. Owner, Cornelius Mundef, 30 North Eleventh street, Wilmington, Del. Brick, new front in store. Contract awarded to Charles J. Dougherty, Wilmington, Del.

Restaurant (alts. and add.), 713 Market street, Wilmington, Del. Architect, J. H. Thompson, Ford Building, Wilmington, Del. Owner, George Pappas, Wilmington, Del. Marble trim, flush bulks, hot water heating, electric lighting. Contract awarded to Wm. D. Haddock & Co., Wilmington, Del.

Miscellaneous Construction News

Emergency Hospital Buildings (26), U. S. Naval Hospital, Ward's Island, N. Y., Spec. 3307, \$1,000,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick, steel, hollow tile, concrete foundations, ready roofing, concrete and composition floors, metal lath, galvanized skylights, roof ventilators, waterproofing, steam heating, electric wiring, asbestos pipe covering, plastic and wall board, screening. Owners taking bids, due September 6th at 11 A. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

U. S. Naval Training Camp Hospital Buildings (341), Spec. 3356, Hampton Roads, Va., \$5,500,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick, reinforced concrete, steel, ready, slag, tin and canvas roofing, concrete, asphalt and composition flooring, hollow tile, metal lath, galvanized steel skylights, ventilators, waterproofing, wall board, steam heating, electric wiring, refrigerators, dumb waiters, laundry and kitchen equipment. Owners taking bids, due September 9th at 11 A. M. Warren-Moore Co., Colonial Trust Building, and F. W. Mark Cont. Co., Finance Building, Philadelphia, are figuring.

Naval Auxiliary Reserve School, Spec. 3304, Naval Training Station, Great Lakes, Ill. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washing-

Buy pure lime, 99% pure, no core, no grit. DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Phila. Both 'phones

HEATING

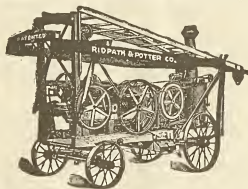
BOWERS BROS. & CO.

1629 Ludlow Street
Philadelphia, Pa.

ton, D. C. Frame, brick and reinforced concrete, ready roof, cement and yellow pine floors, steam heating, electric lighting, metal lath, roof ventilators, tin clad doors, waterproofing. Lowest bidder, C. E. Carson & Co., Chicago, Ill., \$708,845.

Naval Air Station, Spec. 3142, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 1317 F street, Washington, D. C. Frame, reinforced concrete, concrete foundations, ready roof, wood and cement floors, steam heating, electric lighting, metal lath, roof ventilators, dampproofing, plasterboard. Officers' Quarters, Barracks, Mess and Recreation Hall, Guard House, Laboratory and Compressor Building, Oil Storage and Reclaiming Building, Wing Dope, Paint and Carpenter Shop, Dirigible Storehouse and Fabric Shop, Blacksmith Shop, Blower Houses, etc. Contract awarded to Frymier & Hanna Co., 25 West Forty-fifth street, New York City.

Extension to Boiler Plant, Spec. 3244, Navy Yard, Washington, D. C. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel and reinforced concrete, 109x33 feet, 68 feet high, slate and slag roof, concrete piles, electrical wiring, concrete floors, waterproofing, dampproofing. Bids submitted: Austin Co., Washington, D. C., \$159,198, 120 days;



We Drill Wells and Get Water Test Borings and Soundings

LET US SUBMIT PRICES

RIDPATH & POTTER CO

487 Bourse Building
Philadelphia, Penna.

Hyde & Baxter, Washington, D. C., \$158,900, 120 days.

Naval Training Camp, Coddington Point, Newport, R. I., Spec. 3249. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Regimental Quartermaster's Building, Drill Hall, Mess Hall, Guards' Quarters, Regimental Office, Brigade Headquarters, Office Building, Dispensaries, Isolation Building, Swimming Pool, etc. Brick, reinforced concrete, hollow tile, ready shingle and canvas roof, concrete, asphalt, mastic and yellow pine floors, metal lath, galvanized steel skylights, roof ventilators, waterproofing. Contract awarded to Charles B. McGuire, Turkehead Building, Providence, R. I., \$3,474,929.

Philadelphia, \$6,000. Philadelphia Roll and Machine Co. (O), on premises. Geurber Eng. Co. (C), South Bethlehem, Pa. Steel, 1 story, 51x95 feet.

Store and Dwelling, 1006x08 Girard avenue, Philadelphia, \$6,000. M. Green (O), 1004 Girard avenue, Philadelphia. S. Richer (C), 1606 North Seventh street, Philadelphia. Flush bulks.

Dye House, Lawrence and Luzerne streets, Philadelphia, \$500. Robert Meters (O), Fifth and Luzerne streets. Fred C. Zierle (C), 1933 North Fifth street, Philadelphia. Brick, slag roof, alterations.

Garage, Washington Lane and Morten street, Philadelphia, \$650. J. M. Cardeim (O), on premises. Wm. C. Wright (C), 22 Harvey street, Philadelphia. Alterations, stone.

House, 5715 Erdrich street, Philadelphia, \$300. W. Schmitzer (O and C), on premises. Frame porch, 25x8 feet.

Store, 1224 Walnut street, Philadelphia, \$950. Louis Stedair (O), on premises. Basch & Co. (C), 1426 South Front street, Philadelphia. Flush bulks.

Dwelling, 2832 Girard avenue, Philadelphia, \$350. Thos. F. McGowan (O), on premises. M. K. Brown (C), 2718 North Twenty-eighth street, Philadelphia. Porch, brick, 12x10 feet, alterations.

Store and Dwelling, Fourth and Queen sts., Philadelphia, \$1,100. W. Burdick (O), 5300 North Third street, Philadelphia. A. Warshawsky (C), 543 North Fourth street, Philadelphia. Brick, alterations.

Dwelling, 1525 North Twenty-seventh street, Philadelphia, \$5,500. W. McKinley (O), on premises. M. K. Hofmaier (C), 2240 North Orkney street, Philadelphia. Brick alterations.

Garage, Sixty-fourth and Paschall avenue, Philadelphia, \$1,500. Hamilton C. Farrell (O and C), 6505 Woodland avenue, Philadelphia. Brick, 1 story, 20x75 feet, slag roof, cement floor, stone foundations.

Mill Building, Twenty-fifth and Spruce sts., Philadelphia, \$10,000. Cleveland Worsted Mills (O), on premises. Wm. Wrifford (C), West and Mickel streets, Camden, N. J. Brick work, alterations and repairs.

Mill, 245 East Ashmead street, Philadelphia, \$2,000. J. H. Crossingham (O), on premises. Wm. C. Wright (C), 22 Harvey street, Philadelphia. Brick, alterations.

Garage, 3300 North Gratz street, Philadelphia, \$1,500. John Weiss (O), on premises. H. P. Werner (C), 3245 Germantown avenue,

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dry Kiln, Forty-ninth and Botanic avenue, Philadelphia, \$10,000. George W. Smith & Co. (O), on premises. John N. Gill & Co. (C), Otis Building. Brick, 1 story, 146x34 feet, slag roof.

Garage, 535 Pelham road, Philadelphia, \$4,000. Robert Killough (O and C), Wayne avenue and Duval streets, Philadelphia. Stone, 1 story, 12x21 feet, stone foundations.

Dwellings (22), Sixty-fourth street, Lebanon avenue and Marilyn road, West Philadelphia,

\$103,800. John F. McGinty (O and C), 2010 North Broad street, Philadelphia. Brick and stone, 2 stories, 26x32 feet, 16x42 feet, hot water and steam heating, slag roof.

Garage, Pelham road, north of Horter st., Philadelphia, \$1,200. O. B. B. Buhler (O), 6227 Lawton street, Philadelphia. M. Brown Const. Co. (C), 4600 Main street, Philadelphia. Stone, 1 story, 21x25 feet, slate roof, stone foundations.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Manufacturing Building, Thirty-third and Arch streets, Philadelphia, \$1,000. Philling & Sons (O), on premises. J. C. Haldeman (C),

Twenty-third and Arch streets. Minor alterations.

Shop, Twenty-third and Washington avenue,

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.

DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Philadelphia. Brick, 1 story, 20x20 feet, concrete roof.

Store and Dwelling, 2135-38-40-42 South Tenth street, Philadelphia, #935. Max Mirenberg (O), 5 Mattis street, Philadelphia. H. Shestack (C), 3220 Columbia avenue, Philadelphia. Brick, alterations.

Manufacturing Building, 1922 North Front street, Philadelphia, #4400. Quaker City Gear Works (O), on premises. Philip Hailbach Co. (C), Twenty-sixth and Thompson streets, Philadelphia. Brick, general alterations.

Church, Fairhill and Chew streets, Philadelphia, #2,000. Tabor Reformed Church (O), on premises. Chas. W. Bolton & Sons (C), Witherspoon Building, Philadelphia. Frame, 1 story, 24x54 feet.

Store and Dwelling, 2923-25 Kensington avenue, Philadelphia, #1,500. A. Bruggatis (O), 3029 Kensington avenue, Philadelphia. Roland Bull (C), 3128 Reach street, Philadelphia. Brick, 2 stories, 17x32 feet, stone foundation, slag roof.

Garage, 2924-26 Ruth street, Philadelphia, #3,000. A. Grugatis (O), 3029 Kensington avenue, Philadelphia. Roland Bull (C), 3128 Reach street, Philadelphia. Brick, 1 story, 30x57 feet, slag roof, cement floors.

Store, 1019x21 Market street, Philadelphia, #17,000. Sam Sternberger (O), Tenth and Filbert streets, Philadelphia. B. Bornstein (C), 1510 North Franklin street, Philadelphia. Brick, general alterations and interior repairs.

Garage, 1715-20-22 Wood street, Philadelphia, #7,000. James Brown (O), 140 North PSeventeenth street, Philadelphia. Solomon Bros. (C), 63 South Eighth street, Philadelphia. Brick, 1 story, 45x12 feet, cement floor heating, plumbing.

Building, Forty-ninth and Botanic avenue, Philadelphia, #4,500. George W. Smith & Co. (O), Forty-ninth and Botanic avenue, Philadelphia. John N. Gill & Co. (C), Otis Building, Philadelphia. Brick and timber, 1 story, 28x96 feet.

Toilet Room, 410 Race street (rear), Philadelphia, #2,000. Whitall-Tatum Co. (O), 410 Race street, Philadelphia. H. E. Grau Co. (C), 1707 Sansom street, Philadelphia. Cement floor, concrete roof, interior alterations.

Shed, Buckins and Allen streets, Philadelphia, #10,000. Henry Hittner & Sons (O), on premises. Harry Brookhurst (C), 512 West Norris street. Frame shed, 1 story, 50x400 feet, slag roof.

Machine Shop, Front and Richmond streets, Philadelphia, #5,000. G. & H. Barnett (O), 1078 Frankford avenue, Philadelphia. Frank Achuff (C), 1600 North Front street, Philadelphia. Brick, 1 story, 35x46 feet.

Rooming House, 1708 Mount Vernon street, Philadelphia, #3,000. W. Ronell (O and C), on premises. Brick, alterations.

Garage, 3806 Market street, Philadelphia, #3,000. John A. Geiger (O), 2029 West Ontario street, Philadelphia. Charles A. Carr (C), 2029 Ogden street, Philadelphia. Brick, 1 story, 34x17 feet, cement floor, stone foundations.

Forge Shop, Fifty-second and Gray's avenue, Philadelphia, #6,000. Tigon Iron and Steel Co. (O), on premises. Robert B. Lederle (C), Witherspoon Building, Philadelphia. Iron on iron, 1 story, 56x84 feet, concrete foundations.

Store and Offices, 1816 Market street, Philadelphia, #1,500. Fuller Estate (O), 10 South Eighteenth street, Philadelphia. B. J. McKenna (C), 2643 North Hutchinson street, Philadelphia. Brick, alterations.

Garage, St. Martin and Willow Grove avenue, Philadelphia, #500. Mrs. George F. Ne-

gray (O), on premises. George S. Roth & Sons (C), Chestnut Hill, Philadelphia. New shingle roof.

Dwelling, 2119 Cambria street, Philadelphia, #300. Vic Agoelieno (O and C), on premises. Brick, 2 stories, 14x12 feet, stone foundations, slag roof.

Factory, Delaware avenue and Bigler street, Philadelphia, #2,000. General Manufacturing Co. (O), Swanson and Snyder avenue, Philadelphia. Henry P. Friend, Inc. (C), Norristown, Pa. Cement floor and alterations.

Warehouse, 112 Gay street, Philadelphia, #5,000. George H. Davis (O), 4416 Main street, Philadelphia. Wm. H. Eddleman & Sons (C), 453 Grech Lane, Roxboro, Philadelphia. Brick, alterations.

Ice House, 5531-37 Germantown avenue, Philadelphia. Chelton Ice Co. (O), on premises. D. Peters (C), 120 West Seymour street, Philadelphia. Brick, alterations.

Manufacturing Building, Lawrence and Callowhill streets, Philadelphia, #1,100. Samuel H. French & Co. (O), Fourth and Callowhill streets, Philadelphia. Charles E. Baxter (C), Merchautville, N. J. Boiler foundations and settings.

Storage Building, Thirty-sixth and Gray's Ferry Road, Philadelphia, #800. D. B. Martin & Co. (O), Thirtieth and Race streets, Philadelphia. Henry P. Friend, Inc. (C), Norristown, Pa. Brick, alterations.

Library, Sixty-fifth and Girard avenue, Philadelphia, #6,000. City of Philadelphia (O). P. A. Havens & Co. (C), 545 North Nineteenth street, Philadelphia. Alterations, cement floor, etc.

Engine House, Sixty-ninth and Haverford avenue, Philadelphia, #3,000. Mark D. Ring & Sons Co. (O), on premises. Hughes-Foulkrod Co. (C), Commonwealth Building, Philadelphia. Brick and wood, 1 story, 17x40 feet.

Insurance Offices, Fifth and Walnut streets, Philadelphia, #3,000. Crosby Brown (O), on premises. Baker-Smith Co. (C), 1605 Sansom street, Philadelphia. Remodeling steam heating system.

Store, 868 North Marshall street, Philadelphia, #2,000. Max Kane (C), 871 North Sixth street, Philadelphia. R. Gollub (O), 875 North Marshall street. Brick, interior alterations.

Garage, 1527-29-31 Nedo avenue, Philadelphia, #1,050. I. Cofman (O), Lafayette Building, Philadelphia. Philip Robin (C), 2322 E. Cambria street, Philadelphia. Brick, 1 story, 12x20 feet, concrete foundations, slag roof.

Manufacturing Building, Winghooking st. and Frankford Creek, Philadelphia, #7,500. Philadelphia Felt Company (O), on premises. J. A. Hand (C), 8029 Frankford avenue, Philadelphia. Brick, 1 story, 23x23 feet.

Store, 1340 South Penn Square, Philadelphia, #500. John Wanamaker (O), Philadelphia. Basch & Co. (C), 1426 South Front street, Philadelphia. Alterations to bulks.

Garage, 508 South Randolph street, Philadelphia, #400. N. Berlstein (O), 515 South Sixth street, Philadelphia. Sam Rosenberg (C), 612 Tasker street, Philadelphia. Brick, alterations.

All advertising pays—even that which is poorly constructed. A bad ad. is better than no ad. at all. It is worth all that it costs in the competitive world of the present day, merely to keep one's name where the possible buyer cannot help seeing it. To be out of sight in the commercial world is to be out of mind.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently," but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectually than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

Why not try it out?

The cost is not excessive.

Call Mr. L. S. DeLone.

THE BUILDERS' GUIDE

Pennsylvania's Oldest Architectural and Building Trades Magazine

In Continuous Publication 30 Years

Perry Building, Philadelphia.

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

SEMI-MILITARY BUILDINGS IN THE
NATIONAL ARMY CANTONMENTS

(Continued from last week)

At the big cantonments a Y. M. C. A. headquarters building is necessary, and from it the activities in all the centres in any one camp are directed. There the head camp secretary, the camp athletic director, the camp song leader, the camp religious work director, the camp educational secretary, the camp social director and the other head secretaries have their offices and rooms. Their building, too, is the acme of convenience and efficient arrangement. It is an oblong two-story structure, with the entrance slightly to the right of the middle of the longer side. This entrance leads into a diminutive lobby, where are desks, very welcome heating furnaces for the entire building, chairs, and halls leading to right and left. Numerous offices for the various camp secretaries, a larger committee room, and storerooms lined with shelves on shelves and filled with all manner of requisites for the camp work open onto the two halls. Clear across one end of the building at the extreme end of the hall is a one-story lean-to storeroom for heavier materials and supplies. This place is equipped with scales, a truck, a small block and tackle, and the like.

The second floor of the headquarters building is divided lengthwise by a hall which runs from end to end. Doors on this open into the bedrooms of the secretaries, into a well-filled linen closet and into the bathroom. The latter is equipped with basins, shower bath and other customary fixtures. Every inch of space is skillfully made use of, and the headquarters buildings of the Y. M. C. A. in the various cantonments are interesting and convincing examples of the thoroughness with which the Association has attacked the whole problem.

In addition to the auditoriums comprising one wing of every type "E" building, a huge central auditorium is being erected in each of the large cantonments. This structure measures 131 by 106 feet and will seat 2803 men. It will be used for staging plays, vaudeville, concerts, lectures and the large religious gatherings. On Sundays it will be open to Protestant, Catholic and Jewish chaplains in turn, and week days will find it in almost constant use. The central part is free from all supporting posts and is large enough for two basketball courts. At one end is a commodious stage. Footlight, spotlight and scenery facilities have not been overlooked. The auditorium, like the other Y. M. C. A. buildings, is heated by stoves placed on concrete foundations at frequent intervals.

The building known as type "F" is in use in some of the camps and cantonments. It is simply the "E" building with the social hall left off, and is intended for serving units of less than 2000 men. The auditorium wing is made to serve all the many

needs of the men. In this style of building the desk is placed in the middle of the end opposite the stage. Movie booth, bedrooms and storerooms are tucked away above the desk, and offices are at either side. The space under the stage in this type of building as in all the others, furnishes storage facilities.

The total number of Y. M. C. A. buildings either in operation or under construction in the camps and cantonments of this country is somewhat in excess of four hundred. Of these about 150 are standard service buildings and approximately 125 of the "F" type. Besides these permanent buildings 130 tents are in use at various points. Headquarters buildings for each of the thirty-two National Army cantonments and National Guard camps are

included in the total, as well as eighteen auditoriums for the National Army, for one embarkation camp, and one Regular Army expansion camp. A standard service building costs usually from \$7500 to \$9000.

For serving the American Expeditionary Forces in France, a modified form of "F" building is in use. It costs two to three times as much to put up such a building in France as to erect the same building in the United States. The explanation, of course, is the scarcity and high cost of materials in France, the great distance some materials have to be transported and the scarcity of cargo space. Until permanent buildings can be constructed large tents must suffice for much overseas work.—Architectural Record.

UNCLE SAM TO TRAIN EMPLOYMENT
MANAGERS

By Edward D. Jones, Author of "The Business Administrator," Professor of Commerce and Industries, University of Michigan.

The Government has found it necessary to enter the field of education on a large scale. War Emergency Courses in Employment Management, conducted by the Employment Management Division of the War Industries Board, under the auspices of five Governmental Departments, have been arranged for in nine universities to date. The outline of the courses of study was made by Captain Boyd Fisher, who has general supervision of the work.

These courses in employment management are designed to train men or women, who already have a basic experience of at least three years in industrial life and factory methods, and who have come in actual contact with shop problems. Employers of labor, particularly those having war contracts, are urged to suggest men or women from their own organizations as candidates for these courses. With the increasing tightening of the labor situation, it is absolutely essential that large plants have an efficient central employment department. If the Government is to take upon itself the task of furnishing labor when called upon it is necessary that that labor be employed in the proper manner. In other words, each man should be hired to do the thing he is best fitted to do. In these days every man must count and there must be no square pegs in round holes. It has been thoroughly proved that an experienced employment manager, in charge of all hiring and firing, comes very near to solving the labor problem. Therefore it is up to the employer to place his house in order and make the best use of the men with which he is supplied.

The introduction of the employment man-

ager into industry, and the standardization of the services of an employment department is acknowledged to be one of the greatest movements now taking place in the manufacturing industry of this country.

Courses have been arranged for at Harvard, in co-operation with the Massachusetts Institute of Technology, Boston University, in Boston; Columbia University, New York; University of Rochester, Rochester, N. Y.; Carnegie Institute of Technology, and the University of Pittsburgh, Pittsburgh, Pa.; University of Washington, Seattle; and the University of California, at Berkeley.

There already have been 172 graduates from the classes conducted thus far. Most of these have returned to their own plants and placed in operation a department of employment. In each case where a central employment department is in vogue, there is never a thought of returning to the old-fashioned hit or miss method of hiring men.

The courses of instruction in the various schools run from six weeks to two months, and the classes are conducted by the foremost authorities in the country on the various subjects covered.

The course of study deals chiefly with the problems of employment management. Brief consideration is given, however, to statistics, labor economics, and business organization and management. The materials presented on the subject of employment management covers the organization and equipment of an employment department, the employing of the workers, the training of the workers, the payment of the workers, the control of working conditions, effects to keep the work up to standard, and

the government of the shop. There are no charges for the course, except the outlay for living expenses of students and about \$15.00 for books and supplies. It has been arranged to begin new classes as soon as each previous class is graduated, so application for admission to the courses in any of the above named schools may be made at any time.

Employers of labor having candidates for admission to the classes and individual applicants will be furnished with necessary information concerning qualifications for admission and other data regarding the courses by addressing Captain Boyd Fisher, 717 Thirteenth street, N. W., Washington, D. C.

Business is founded on reciprocity and co-operation. Any other plan than this spells bankruptcy. The successful business nowadays has a heart and a soul.

You can't expect to do your "bit" of this busy world's business unless you enlist in the advertising ranks.

"WHAT FOOLS THESE MORTALS BE."

An able honest man, if poor, is a damphool!
An able dishonest man, if "smart," is sometimes rich;

But while an able, honest man, if smart, should be rich, an

Able crook, however rich, is nothing but a damphool! WILLIS POLK.

The "Builders' Guide" is in its thirty-third year of continuous publication.

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

"Facts are stubborn things." Advertise only the truth about your product and watch the result.

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

Man and the giraffe are the only two living things that can't swim naturally. Throw a day-old kitten into the Mississippi and it will paddle its way to shore. The giraffe can't swim because he's not built that way. Man can't swim, just because he is afraid. The chances are that the reason you are not in the swim—financially or otherwise—is because you are afraid.—Glen Buck.

"Camouflage" doesn't pay in advertising. Don't call your cannon a bit of landscape. Be honest and gain the confidence of the public.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

The only road to advancement is to do your work so well that you are always ahead of the demands of your position. Our employers do not decide whether we shall stay where we are or go on and up; we decide that matter ourselves. Success or failure is not chosen for us: we choose them for ourselves.—H. W. Mabie.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A carload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

America stands supreme in the development and use of advertising, and advertising is the seed which by implanting desire produces the fruit of social advancement. Education promotes efficiency and efficiency in turn makes possible higher earning power, higher purchasing power and improved living conditions.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

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126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL**\$28,477,242.66**

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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Explosion
Inland Transit
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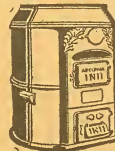
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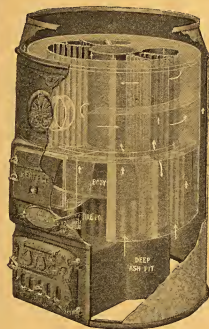
Builders' Guide

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Vol. XXXIII., No. 37
September 11, 1918

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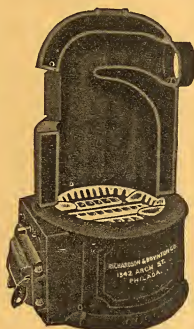
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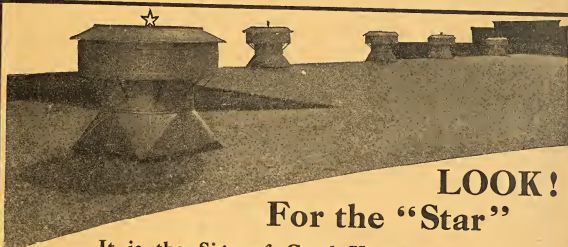


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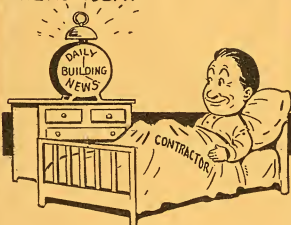
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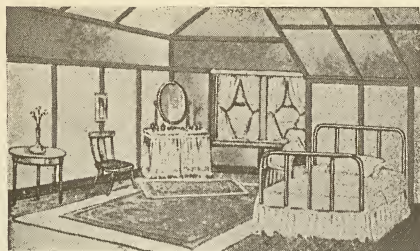
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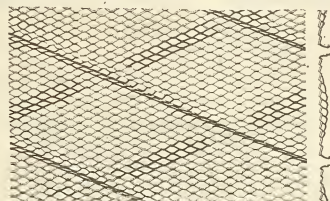
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 37

PHILADELPHIA
September 11, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
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As The Editor Sees It



HOUSING has been discussed to a great extent in Building Publications, and many destructive criticisms have been made of plans considered for alleviating existing living conditions of the workman. Noteworthy constructive suggestions are made by Noble Foster Hoggson, who writes in "Workmen's Homes from the Community Standpoint:"

"Civic bodies throughout the country are manifesting great concern in the matter of properly housing workmen in local manufacturing plants. It is important that such interest be properly directed. Chambers of commerce, boards of trade and manufacturers' organizations are giving earnest thought to this subject, and many of these bodies are planning methods by which homes may be provided for operatives coming daily into already overcrowded cities.

Housing of workmen is a vital question in every industrial center. Many cities have organized housing committees. Local manufacturers are demanding relief from expensive labor turnover. In some communities the housing question has been stressed by the sudden expansion of Government arsenals, where from five to eight times as many men are employed in the factories as before the war. In such sections, and for that matter in every community where war supplies are being manufactured, there exists a strong, impelling patriotic motive for civic bodies to put forth their best efforts to properly house the labor that is engaged on war work.

The national industrial housing shortage has become so acute that in considering the location of a new factory the first question asked is relative to housing possibilities. The community which can offer good housing facilities not only attracts industry but will be able to maintain undiminished industrial activity long after the war has ceased.

The value of large payrolls is thoroughly appreciated by civic bodies. Yet it must be realized that the value of a payroll to any community is largely dependent upon the proportion of well-housed married men among the industrial population. Such men, with their families, spend or bank their entire receipts locally. A poorly housed working force will be found to consist largely of single men of the transient type or married men boarding near the plant. These men send a large proportion of their wages to families located in some distant city. From the community standpoint well-planned industrial housing is a paying investment in that it carries with it a financial activity which is beneficial to all local business.

Stimulation of local interest, which will result in the actual provision of housing, can be carried out only through proper methodical investigation. Local support for a housing program can best be gained by civic bodies presenting the proposition in an attractive, appealing, and forceful manner to the heads of industries most directly affected or those which are likely to become affected.

The ultimate benefit to the community

in establishing a stable, well-housed working population is so great and of such value that every effort should be made to meet the housing shortage through local means. The issue should be faced and prompt steps taken to satisfy an immediate need.

Another fact to be considered is after-war decentralization. Extensive plans are already under way to render suburban and farm life more attractive to the workman. Farm and factory are to bid against each other for labor. Production is to be at its most highly developed stage, and labor, now more than ever, is at once the servant and master of production.

Our industrial centers depend upon factory production as to the commercial foundation for the community structure, so they must look to the keystone of that foundation—labor. The workman must be housed attractively and honestly if in the years to come many of our present thriving industrial centers shall not collapse."

* * *

FOLLOWING these thoughts, Mr. C. E. Schermerhorn, Architect, presents very forcibly a feasible plan whereby the workmen can own his own home. Mr. Schermerhorn advocates the establishment of "a Government Individual Home Building Corporation, and his article under this heading is so full of valuable suggestions that we reproduce it verbatim. Mr. Schermerhorn says:

"The 'Own-your-home' movement is making rapid strides throughout the

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country and promises that the term will be more than a mere slogan also that the seriousness of the present housing problem is hardly comprehended and the necessity of obtaining a solution for prompt relief is one of the paramount questions of the day.

Some remedy must become manifest in the immediate future for the practical solution of this vexing and important problem as the expansion and gradual development of Government housing projects is only partially answering the exigencies of war-time conditions and it is essential that some solution be made for an immense increase in the number of new homes, if we are to reach the highest degree of efficiency and good morale in the work of the country.

The need of ordinary residential building is an impetus to labor and with their wages at the present time more than adequate, for the accustomed way of life, an outlet for this additional money must be provided and no better solution could be created, that will reflect a benefit to the nation, than to enable the workers to possess or own an equity in a home; as the possession of a permanent residence fosters an increased community spirit and more serious consideration of citizenship duties.

The need for housing in congested districts is being cared for by the Federal authorities but there is still another war-time necessity other than the mere housing groups, and that is—to encourage, assist and enable all war-workers, in every section of the country to own a home, by providing them with the proper data, information and essential funds.

We have been inclined to expect the immigrant to love America when he knew only the unwholesome hidden part of a crowded city, a dismal and faded replica of the old home he had left. He has little chance to enter American community life, to appreciate the democratic institution or be influenced by a real home, so naturally his interests in American ideals and projects are naturally correspondingly deficient and often-times he is discontented, uninterested and unsympathetic with the interests of the nation.

The Americanization of the immigrant cannot be accomplished by charitable or secular groups and this problem, of such national significance, should be adequately dealt with by our Government in encouraging and providing proper means for them to obtain and own living accommodations with proper surroundings.

Ex-president Roosevelt recently remarked, 'But little attention seems to have been paid to the decline in owned houses, an aspect of our social life which is no less serious in its import and unconsciously we seem to be on the verge of a complete surrender of the political

ideal which gave the U. S. its position among nations, for it is a recognized fact that house ownership is the backbone of any sound national structure.'

The shortage of housing facilities for workmen has become a matter of national concern and a solution must be found to stimulate the construction of homes, as it has a vital bearing upon the efficiency of labor employed in war industries.

England has had the same experience that this country is now facing as regards the shortage of homes and the London Economist in a recent issue states that, 'it will be necessary to make provision after the war for an estimated shortage of 500,000 houses.' Now what are we to do?

The question as to whether the Government should provide funds for houses in which our war-workers are to live, is about as debatable as whether it should build ships or conscript men.

Senator Morris Sheppard of Texas in a recent speech in the United States Senate pointed to the fact that 'almost every country of importance (other than America) has taken definite legislative steps to enable the people to acquire and maintain homes and nearly all the leading nations have constructive land purchase and land settlement policies by which the Government aids the masses in securing homes.'

How best to house our workmen and their families is not solely a material question, it has its emotional and sentimental side and the secret of industrial harmony is contentment.

Through a special department under the control and direction of the United States Housing Corporation of the Department of Labor, it would be thoroughly practical to have carefully studied and prepared working drawings of standardized single-family, self-contained, detached, two, three and four bed room types of houses, somewhat varied in design and made in sufficient series to cover structural requirements for building with stone, brick, concrete, hollow-tile, or frame encased with various available local materials.

To each design there should be appended an exhaustive itemized list of the required sizes, quantities and grade of the various materials essential, so that there would be no occasion for confusion in ordering adequate quantities; there should also be provided clear and concise specifications and instructions for every branch of labor, materials and finish necessary to complete the building; there could also be added a list of representative firms who manufacture and furnish standard stock types of doors, sashes, trim, hardware, plumbing supplies, lighting fixtures, various types of heating apparatus, etc.

There should also be prepared a brochure advising concerning grading of lot, aspect of rooms, drainage, water supply, walks, color combinations for painting, etc.

The drawings, specifications and instructions should be intelligently distributed to contemplating home builders who, possessing or about to purchase a lot, would apply for and answer a questionnaire pertaining to such essential facts as local conditions of site, water supply, drainage, environment, compass points, distance from railroad station, trolley, school, etc., also sex and vocation of applicant, his original nationality, family, dependents, distance from and character of employment.

It could be arranged to have this Government Corporation finance each individual project, and although entailing considerable detail, the character of available man material has never been lacking in our country and when the benefits to cause, country and citizen are considered, a practical organization will readily be formed.

Inasmuch as the resources of the average workman are limited, the prime factor in building these single detached homes is to limit the cost of construction in every way practicable to supply the workmen's needs, and at the same time furnish sufficient for his comfort and happiness at a price well within his means. As it is not within the average workman's power to furnish capital with which to purchase a home outright, we must solve this economic problem by studying the many experiments which have been made by manufacturing interests to furnish their employees with homes on a part payment basis.

A Corporation under Government control could be formulated, for no matter whether the building of homes for workmen is prompted by philanthropy or for financial gain, the building of one, nevertheless, adds just one more to our growing army of home owners and tends to inspire thrift, comfort and independence—the root of genuine Americanism.

This U. S. House-building Corporation could be formed and placed in a position to buy or contract for all required structural and finishing materials, also fixtures and appliances in large quantities and intelligently direct its distribution from various sections in the country, in fact in many cases, it would be quite possible to send everything for one house in several cars, direct to the community in which a house is to be constructed in this manner eliminating possibilities of freight congestion and long hauls, yet still retain a firm hold on the question of essential embargoes and unessential construction.

An American citizen owing a lot clear

of encumbrances, who agrees to remain on war-work for the duration of this strife, would be entitled to make application for a loan on the type of house to be intelligently determined upon as best suited to his needs and funds, the U. S. Corporation guaranteeing payment and releasing materials to the properly and adequately bonded subscriber, that he shall fully comply with terms of his contract and the plans and specifications; when the house is completed the Corporation would have a rigid inspection made and when work is approved, put into effect the required schedule of monthly payments, after the creation of the long term, low rate mortgages with accompanying bonds.

The payment being made monthly, in shape of a fixed amount to a saving or mortgage reduction fund also interest on mortgages, taxes, water rent and insurance, arrangements for an easy means for the owner to liquidate his obligation and encourages the making of additional obligation reduction payments from time to time to save interest charges—it also affords an avenue for the liquidation of Liberty Bonds as they mature, or may be called, for these home buyers are certain to possess one or more of each series.

Through this Corporation it ought to

be possible to effect substantial economies by co-operation, in other words a large wholesale business, with carefully worked out standardized plans, limited to a few varieties and sound practical construction; for one of the reasons for present high costs is the want of adequate capital necessary for setting in motion the construction of homes of the right sort, and in number exceeding anything we have heretofore known. There are thousands of workers who own, or are paying for lots on installments, who are desirous of building a home but lack the opportunity for want of proper advice as to methods of construction and a clear knowledge as to how to proceed or where to obtain the essential additional loan of funds beyond the equity they can offer.

When one realizes that the number of families added to the population of these United States each year, is about one-half million and to supply them with new houses (not considering fire-losses and depreciation) would cost at least one billion dollars, one can begin to visualize the urgent necessity that our Government must come to the aid of this condition; our big business interests will not respond as housing only offers moderate profits, so let the capital come in the elimination of profits and speculation; from the

wage-earners themselves—our Government.

This Government controlled housing Corporation would be enabled to commandeer adequate sites, economically develop tracts, place the street improvements, etc., and the benefiting local manufacturers could readily be induced to bear the cost of recreation centers for a well-house stabilized home working force whose only initiation fee, under this utopian plan, would be to pay the actual cost of the lot he may select to purchase.

A question has arisen as to whether labor unions would interfere with the purchase of homes by workmen because such ownership renders labor less flexible, but if the subject is carefully analyzed it would be realized that in most industrial centers available housing has been used up, the units of manufacturing are not singular and a man is not dependent upon one job for a living and besides, organized labor is a solid structure which always has supported the Government and if otherwise inclined could not overcome the home-owning instincts born in every man.

What labor wants and is entitled to is a comfortable living, sure pay, educational and community facilities."

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Emergency Hospital Buildings, Spec. 3297, Gray's Ferry Road, Philadelphia, \$355,000. Architect, private plans. Owners, U. S. Government, care of C. W. Pars, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hospital Corps Barracks (2), 2 stories, 118x164 feet; Nurses' Quarters, 3 stories and basement, 192x65 feet; Subsistence Building, 1 story, 142x45 feet and 34x79 feet; Boiler House and Laundry, 2 stories and mezzanine floor, 67x48 feet; Wards (8), 2 stories, 113x190 feet; Observation Ward, 2 stories, 399x190 feet; Officers' Ward Building, 2 stories, 107x34 feet; Shed, 1 story, 80x30 feet, frame, hollow tile, brick, concrete foundations, ready and slag roof, composition and cement floors, metal lath, ventilators, fireproof and tinclad doors, kalamein doors, steam heating, electric wiring. Owners taking bids, due September 16th at 11 A. M. Warren-Moore Co., Colonial Trust Building; Cramp & Co., Ikenekia Building; T. C. Trafford, 1613 Sansom street; Melody & Keating, 1322 Race street; Hogg Construction Co., 1634 Sansom street; Wm. R. Dougherty, 1610 Sansom street, and

F. W. Mark Cont. Co., Finance Building, are figuring.

Car Barn (alts.), 49th & Woodland avenue, Philadelphia, \$45,000. Architect, Private Plans. Owners, Philadelphia Rapid Transit Company, 8th & Dauphin streets, Philadelphia. Steel & concrete runway for crane, and general alterations. Owners will build.

Boiler Plant, Nicetown, Philadelphia. Architect, private plans. Owners, U. S. Midvale Gun Plant, Widener Bldg., Philadelphia. Brick, steel, concrete, terra cotta coping, 92x48 feet, slag roof, rolled steel sash, safety treads, waterproofing, steel stairs (wiring reserved). Owners taking bids due as soon as possible. Irwin & Leighton, 126 North 12th street, Barclay, White & Co., 1713 Sansom st., F. W. Mark Contracting Co., Finance Bldg., W. W. Lindsay & Co., Harrison Bldg.; John M. Yardley, 1716 Sansom street; Lam Building Co., 1001 Wood street; Wark Co., 1737 Filbert street, all of Philadelphia, and Levering & Garrigues, 556 West Twenty-third street, New York City, are figuring.

Repair Shop (alts.), 12th and Reeds streets,

Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owner, City of Philadelphia, Department of Public Works, 215 City Hall. General repairs, cement floors, steam heating, electric lighting, plumbing. Lowest bids submitted by E. C. Durrell, 1713 N. 24th street, \$12,556, Mitchell Bros., 2125 Race st., \$13,980.

Garage, Magnolia & Sharpnack streets, Gtn., \$3,000. Architect, private plans. Owner, John M. DiPaul, 80 E. Sharpnack street, Germantown. Stone, 1 story, 40x57 feet, slag roof, electric lighting. Owner will build.

Carpenter Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Brick, reinforced concrete and steel, 2 stories, 243 feet, 10 inchesx53½ feet, slate, tin and slag roof, cement, maple and wood block floors, hollow tile, metal lath, 1 electric elevator, safety treads, roof ventilators, waterproofing, wire work, iron ladders, rolled steel sash, rolled steel and hollow metal skylights, fire, steel and kalamein doors. Owners taking bids, due September 16th.

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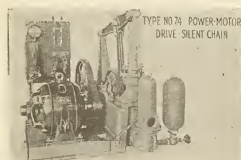
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Wm. R. Dougherty, 1610 Sanson street; F. W. Mark Cont. Co., Finance Building, and Wark Co., 1737 Filbert street; J. S. Rogers & Co., Drexel Building; W. W. Anstine & Co., 1218 Filbert street, are figuring.

Seaplane Hangar, Spec. 3341, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, asbestos covered metal walls, 200x150x50 feet, concrete foundations, wood piles, composition roof, concrete floors, electric lighting, rolled steel sash, asbestos covered doors. Owners taking bids, due September 16th. Warren-Moore Co., Colonial Trust Building; Melody & Keating, 1322 Race street; Hughes-Foulkrod Co., Commonwealth Building; Thos. Reilly, 1616 Thompson street, are figuring.

Monastery (alt.) and New Chapel, southeast corner of Corinthian and Girard avenues, Philadelphia. Architect, Paul A. Monaghan, Drexel Building. Owners, Nuns of the St. Clare, Chapel of Our Lady of Peace, care of architect. Preliminary plans in progress. Too early for details.

Emergency Hospital Buildings (15), Navy Yard, Spec. 3334, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Nurses' Quarters, 3 stories, 248x62 feet; Sub-sistence Building, 2 stories, 202x60 feet; Barracks (2), 2 stories, 117x30 feet; Administration Building, 2 stories, 60x30 feet; Observation Ward, 2 stories, 173x38 feet; Vards (8), 2 stories, 173x118 feet; Garage, 1 story, 30x20 feet, frame, brick, hollow tile, stucco, wood piles, ready, slag and canvas roof, composition, cement and yellow pine floors, metal lath, elevators, ventilators, metal window guards, kalamein doors, galvanized steel skylights, refrigerators, dumbwaiters, steam heating, electric lighting. Lowest bids submitted by Wm. R. Dougherty, 1610 Sanson street, \$652,000; Warren-Moore Co., Colonial Trust Building, \$695,000; M. H. McCloskey, Jr., 1620 Thompson street, \$696,000.

Workmen's Houses (600), Seventy-second and Elmwood avenue, Philadelphia. Architect, private plans. Owners, Emergency Fleet Corp., 136 South Sixteenth street, Philadelphia. Brick, 2 stories, 16x30 feet, slag roof, cement and pine floors, hot air and steam heating, electric lighting, dampproofing, ornamental iron work. Owners taking bids, due September 11th. Henry P. Schneider, 3713 Old York Road, and Moss-Taylor & Crawford, Fifty-eighth and Girard avenue, are figuring.

Sand House, Reed street freight yard, Philadelphia. Architect, private plans. Owners, Pennsylvania R. R. Co., care of E. J. Cleave, superintendent, 3200 Powelton avenue, Philadelphia. Brick, 2 stories, metal lath. Details later. Owners taking bids, due September 18. Smith-Hardican Co., 1606 Cherry street; Wm.

R. Dougherty, 1610 Sanson street; J. M. Yardley, 1716 Sanson street; D. Henwood, 1509 Wood street; A. L. Carhart, Penfield Building; Wm. Chas. Doll, Abbott Building; E. E. Holteback, Inc., 1804 Brandywine street; Harry R. Rust, 724 Ludlow street; A. R. Raff Cont. Co., 1636 Thompson street; R. C. Ballinger & Co., 218 North Thirteenth street; F. A. Havens & Co., 845 North Nineteenth street; Stacy Reeves & Sons, 2011 Market street; Thos. C. Trafford, 1613 Sanson street; Ketcham & McQuade, 1029 Brown street; Monaghan & Losse, 3016 Chestnut street; T. J. Carberry, Heed Building; P. Hainbach Cont. Co., Twenty-sixth and Thompson streets; Thos. Little & Sons Co., 1713 Moravian street; Brann & Stuart, Commercial Trust Building, and Armstrong & Latta, Land Title Building, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man
and Interior and Exterior Fitter.

Residences (30), Fernhill & Apsley streets, Philadelphia, \$93,000. Architect, private plans. Owner, John H. McClatchey, Land Title Bldg., Philadelphia. Brick, 3 stories, 16x30 feet, slag roof, hot air heating, electric lighting. Owner will build.

Gymnasium, 15th street, south of Spring Garden street, \$4,400. Architect, private plans. Owners, Baldwin Locomotive Works, 500 N. Broad street, Philadelphia. Consists of alterations, maple floors, pastering, skylights. Contract awarded to F. B. Davis, 240 N. 16th street, Philadelphia.

Mill Building, River Road, No. of Leverington street, \$7,000. Architect, Albert C. Wood, Stock Exchange Bldg., Philadelphia. Owners, Wabash Mills Co., Inc., on premises. Stone work, elevator hatchway, 11x7 feet. Contract awarded to E. L. Cuthebertson, 334 Roxboro avenue, Roxboro.

Repair Shop (alts.), 1309 Carlton st., Phila., \$2,500. Architect, private plans. Owner, Robert Grunt & Son, 1514 Vine street, Philadelphia. Stone foundations, brick, 32x35x12 feet high, slag roof, cement floor. Contract awarded to John Welsh, 138 N. 17th street, Philadelphia.

Locker Room, Margaret & Bermuda streets, Philadelphia, \$8,000. Architect, private plans. Owners, Barrett Mfg. Co., on premises. Reinforced concrete, 2 stories, 40x50 feet, 30 feet high, slag roof, steel sash, cement floors, steam heating. Contract awarded to Turner Concrete Steel Co., 1713 Sanson street.

Chapel (alts.), 18th & Morris streets, Phila., \$12,970. Architect, E. F. Durang, 1220 Locust street, Philadelphia. Owner, St. Thomas' R. C. Church, care of Rev. Francis J. Sheehan, on premises. Repainting walls, exterior paint-

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FIRST, motor trucks are to be sold *only* for necessary work, either directly for war work or to facilitate the transportation of such essentials as food, fuel, etc., or for important construction work.

SECOND, motor truck owners must see to it that their trucks are operated so as to require the minimum of spare parts and repair work.

THIRD, no truck must be discarded if it can be rebuilt so as to operate efficiently.

FOURTH, every truck in use must be routed to carry as many tons a day as is economically possible. Empty runs must be cut to a minimum.

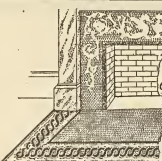
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ing and new roof. Contract awarded to Wm. J. McShane, 417 S. 13th street, Phila.

Men's Toilet and Locker Room, Nicetown, Philadelphia, \$14,000. Architect, private plans. Owners, Midvale Steel and Ordnance Co., Widener Building, Philadelphia. Brick and concrete, 1 story, 16½x65 feet, gypsum and slag roof, cement floors, concrete foundations, steam heating, rolled steel sash, safety treads, waterproofing. Contract awarded to Barclay White & Co., 1713 Sansom street, Philadelphia.

Hotel (alt. and add.), 219 South Broad street, Philadelphia. Architect, Carl P. Berger, 1416 South Penn Square, Philadelphia. Owner, W. E. Adams, on premises. Brick, 4 stories, 33x130 feet, slag roof, stone foundations, steam heating, electric lighting, tile work, hollow metal sash and skylights, fire and kalamein doors, pine and tile floors, metal lath, roof ventilators, metal ceilings, fire escapes. Contract awarded to David A. McClelland, 4011 Baring street, Philadelphia.

Coal Wharf and Engine House, No. 2, West Philadelphia. Architect, private plans. Owners, Pennsylvania R. R. Co., 3200 Powelton avenue, Philadelphia. Consists of extension to coal wharf and stalls, brick work, timber, concrete, etc., and general repairs. Contract awarded to Brann & Stuart, Commercial Trust Building.

Engine House, Forty-sixth street, West Philadelphia. Architect, private plans. Owners, Pennsylvania R. R. Co., 3200 Powelton avenue, West Philadelphia. Brick and concrete work, extension to stalls. Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway.

College Building (alts.), Girard College, Philadelphia, \$4,000. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Girard College and Board of City Trusts, Land Title Building. Interior alterations and plumbing. Contract awarded to F. L. Hoover & Sons, 1023 Cherry street, Philadelphia.

Building (alts.), Sixth and Noble streets, Philadelphia, \$15,000. Architect, private plans. Owner, Estate of Richard Smith, Fidelity Trust Co., Philadelphia. Consists of extensive alterations. Contract awarded to F. L. Hoover & Son, 1023 Cherry street, Philadelphia.

Office Building (add.), 1713 Filbert street, Philadelphia, \$9,000. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Brick, third story addition, 14x112 feet. Contract awarded to Harry R. Rust, 19 South Eighth street, Philadelphia.

Additional Refrigerating Facilities, Restaurant, Broad Street Station, Philadelphia. Architect, Maintenance of Way Department, Broad Street Station, Philadelphia. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. New doorways, cement steps, mezzanine floors, insulated reinforced concrete floors, electric lighting, hollow tile, metal lath, safety treads. Contract awarded to F. A. Havens & Co., 845 North Nineteenth street, Philadelphia.

Store (alts.), 44 North Eighth street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Samuel Rosman, care of architect. New front, metal bulks, tile, marble and terrazzo work, rolled steel sash, electric lighting, mill work, metal lath, cement floors, plastering, plumbing and glazing. Contract awarded to Basch & Co., 1430 South Front street, Philadelphia.

Residence, Vincent street, north of Rising Sun avenue, \$3,500. Architect, private plans. Owner, C. M. Stevens, 910 Fanshaw street, Philadelphia. Brick, 2 stories, 25x35 feet, asphalt shingle roof, hot air heating. Owner will build.

Garage, 748 South Swanson street, Philadelphia, \$6,800. Architect, Charles E. Oelshlager, 1615 Walnut street, Philadelphia. Owner, James Gallagher, Inc., 810 South Swanson street, Philadelphia. Brick, 1 story, 33x160 feet, slag roof, stone foundations, steam heat, electric light, cement floors, hollow metal skylights. Contract awarded to Max J. Benamy, 3042 West York street.

A certain wallboard man advertised in the Guide for awhile and then dropped out. We've had a dozen inquiries since then, asking for his address—every inquiry from a cash buyer. This is a common occurrence. It's hard to make some advertisers see the vital importance of a standing "ad."

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Pennsylvania Construction News

Storehouse, Bag and Ammunition Filling House, U. S. Naval Magazine, Ft. Mifflin, Pa., Spec. 3288. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards & Docks, Navy Dept., Washington, D. C. Brick, hollow tile and concrete, 1 story, 30x160 and 30x142 feet, slag roof, concrete foundations, cement floors, electric lighting, hollow metal sash, roof ventilators. Low bid submitted by Hagen Lumber Co., Scranton, Pa., \$37,980.

Storehouse (4), Ft. Mifflin, Pa., Spec. 3187. Architect, private plans. Owner, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Brick or tile walls, 1 story, 250x50 feet each, slag, asphalt, or asbestos roof, concrete floors, hollow tile, electric lighting, glazed steel sash, concrete foundations, metal covered doors, roof ventilators. Lowest bid submitted by J. S. Rogers Co., Drexel Bldg., Phila., \$140,328.

Operating Building, West Chester, Pa. Architects, Stewardson & Page, 316 Walnut st., Philadelphia. Owners, Chester County Hospital, West Chester, Pa. Brick and concrete, 2 stories, 43½x52½ feet, slag roof, concrete floors, stone foundations, marble and terrazzo work, (heating and lighting, reserved). Architects taking bids due September 16th. F. E. Wallace, 1220 Chancellor street, R. C. Ballinger & Co., 215 N. 13th street, H. H. Barrell, 206 S. Quince street, Stacy Reeves & Sons, 2011 Market street, Philadelphia, and Cloyd Baldwin, West Chester, Pa., are figuring.

Locker and Wash Room, Primos, Delaware County, Pa. Architects, Peuckert & Wuhder, 310 Chestnut street, Philadelphia. Owners, Primos Chemical Co., Primos, Delaware County, Pa. Hollow tile, 1 story, 90x35 feet, shingle roof, cement floors, steam heating, electric lighting. Architects taking bids, due September 12th. H. E. Grau Co., 1707 Sansom street; Mower Bros., Merion, Pa.; D. Arthur Meckert, Glenolden, Pa.; Jordan Bros., Clifton Heights, Pa.; Thomas Manley, Clifton Heights, Pa., and James Booth, Garrettsford, Pa., are figuring.

Steel Fabrication Shop, New Castle, Pa., \$450,000. Architect, private plans. Owners, Standard Steel Car Co., Pittsburgh, Pa. Steel and brick, 1 story, 160x52 and 80x258 feet, slag roof, rolled steel sash. Contract awarded to Hughes-Foulkrod Co., Commonwealth Bldg., Phila.

Lunch Room and Turkish Bath, 212-14 Mill street, Bristol, Pa. Architect, I. W. Levin, 2434 S. 8th street, Philadelphia. Owner, L. E. Vorvor, Bristol, Pa. Brick, slow burning construction, 2 stories, 30x75 feet, slag roof, steam heating, electric lighting, tile and marble work, yellow pine and cement floors, metal ceilings, flush bulks, plate glass. Contract awarded to J. Kall, 716 Spring Garden street, Philadelphia.

The impractical dreamers are not the architects, but the clients themselves, as a rule.

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NEW JERSEY Construction News

Church and Sunday School and Parsonage, Trenton, N. J. Architect, Chas. Bolton & Sons, Witherspoon Bld., Phila. Owners, Pilgrim Presbyterian Church, care of Rev. M. Hughes, Trenton, N. J. Brick and stone, 1 story and 3 stories, slate roof, hardwood floors, steam heating. Plans completed. Architects ready for bids.

Ice Storage Building, New Rose st, Trenton, N. J. Architect, J. O. Hunt, 114 N. Montgomery street, Trenton, N. J. Owners, Sanitary Ice & Coal Co., New Rose street, Trenton, N. J. Brick and cork insulating, 1 story, (60 feet high), 25x70 feet, asbestos roof, cement and cork floors, electric lighting, refrigerating system, roof ventilators. Plans in progress.

Factory and Office (add.), Fall st, Trenton, N. J. Architect, private plans. Owners, M. M. Metal Co., Fall street, Trenton, N. J. Addition to present building. Owner taking bids.

Residence (alt.), 240 Academy street, Trenton, N. J. Architects, Fowler & Seaman, Broad st, Nat. Bk. Bldg., Trenton, N. J. Owner, R. Morgan, Broad st., Nat. Bk. Bldg., Trenton, N. J. Brick, 3 stories, 22x70 feet, hot water heating, oak floors (electric lighting and painting, reserved). Plans completed. Architects are ready for bids due Sept. 14th.

Garage, 497 W. State street, Trenton, N. J. Architects, Fowler & Seaman, Broad street, Bank Bldg., Trenton, N. J. Owner, H. Hall Katzenbach, on premises. Brick, 2 stories, 24x30 feet, slate roof, concrete floors, electric lighting (heating, reserved). Owners taking bids. J. H. Morris, S. W. Mather & Son, Edw. LaRue & Samuel Wiley, all of Trenton, N. J., are figuring.

Residences, Lawrence, N. J., \$4,000. Architect, J. O. Hunt, 114 N. Montgomery st, Trenton, N. J. Owners, Kennedy & Pileock, Forst Richey Bldg., Trenton, N. J. Brick, 2 stories, 17x54 feet, slate roof, stone foundations, hot air heating, electric lighting, hardwood floors. Architects taking bids. J. H. Morris, Burton & Burton, Herman Hughes & Charles Smith, all of Trenton, are figuring.

Warehouse, State street and River avenue, Camden, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, B. F. Boyer Co., on premises.

Brick and concrete, 1 story, 72x102 feet, concrete foundations, slag roof, cement floors, rolled steel sash. Architects taking bids, due September 11th. H. E. Baton, 1713 Sansom street; Sutton & Stephenson, 1317 Washington avenue, Philip Hailbach Cont. Co., Twenty-sixth and Thompson streets; Robert E. Lamb, 843 North Nineteenth street; Ketcham & McQuade, 1029 Brown street; J. S. Rogers Co., Drexel Building, and Wark Co., 1737 Filbert street, Philadelphia, are figuring.

Marine Barracks, Tuckerton, N. J., Spec. 3404. Architect, private plans. Owner, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Owners taking bids. T. C. Trafford, 1613 Sansom street; John M. Yardley, 1716 Sansom street, Philadelphia, are figuring.

General Store House, Cape May, N. J., Spec. 3346. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Concrete, brick, hollow tile and stucco, 1 story, 120x105 feet, ready or tin roof, wood and cement floors, hollow tile, metal lath, steam heating, electric lighting, roof ventilators, wood foundations. Owners taking bids, due September 16th. Cramp & Co., Denekla Building; Hogg Const. Co., 1634 Sansom street, and Thos. Reilly, 1616 Thompson street, are figuring.

Smoke Stack to Boiler House, Boys Home, Jamesburg, N. J. Architect, J. H. Bent, Capitol Bldg., Trenton, N. J. Owner, State Home for Boys, care of Wm. Edmunds, Supt., Jamesburg, N. J. Brick, 125 feet high and revision to heating. Contract awarded to Rust Eng. Co., New York City.

Garage, Chambers street, Trenton, N. J., \$4,000. Architect, private plans. Owners, Frank Delaware Piano Co., on premises. Cement block, 1 story, 38x94 feet, flat truss roof, cement floors, electric lighting. Contract awarded to W. B. Cadwallader, Trenton, N. J.

Garage, West State street, Trenton, N. J., \$2,000. Architect, private plans. Owner, Lewis C. Case, Jr., on premises. Brick, 1 story, 18x20 feet, slag roof, brick foundations, steam heating, electric lighting, concrete floors. Contract awarded to Lewis C. Case, Trenton, N. J.

roof ventilators, tin clad doors, water proofing. Lowest bidder, Paschen Bros., Chicago, Ill., \$759,000.

Emergency Hospital Buildings (26), U. S. Naval Hospital, Ward's Island, N. Y., Spec. 3307. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick, steel, hollow tile, concrete foundations, ready roofing, concrete and composition floors, metal lath, galvanized skylights, roof ventilators, waterproofing, steam heating, electric wiring, asbestos pipe covering, plastic and wallboard, screening. Bids opened as follows: Item No. 1, Warren-Moore Co., Philadelphia, \$1,375,000; Marble Arch Co., New York City, \$1,650,000. Item No. 2, Warren-Moore Co., Philadelphia, \$1,096,000; Marble Arch Co., New York City, \$1,100,000. Item No. 3, Warren-Moore Co., Philadelphia, \$1,412,000; Marble Arch Co., New York City, \$1,350,000. Item No. 4, Warren-Moore Co., Philadelphia, \$90,438; Marble Arch Co., New York City, \$100,000. Item No. 5, Warren-Moore Co., Philadelphia, \$1,490,000; Marble Arch Co., New York City, \$1,340,000.

Nitrate Plant, Spec. 3365, Indian Head, Md., \$180,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans completed. Owners are ready for bids.

Mill Buildings, Genesee and Doat streets, Buffalo, N. Y. Architect, W. E. S. Dyer, Land Title Building, Philadelphia. Owners, Monarch Knitting Co., Ltd., Buffalo, N. Y. Reinforced concrete and fireproof, consisting of Dye House, Bleach House, Power House, Chimney Foundation, Covered Passageway, Elevator Shaft, etc., 1 story, 110 feet 10 inchesx54 feet 10 inches, concrete foundations, cement floors, metal lath, slag roof, fire doors, roof ventilators. Architect taking bids. H. E. Baton, 1713 Sansom street, Philadelphia, and Wm. Williams, Wm. J. Baynes, Jacob Adrian and Robert E. Williams, all of Buffalo, N. Y., are figuring.

Apartment, Twenty-eighth and Washington street, Wilmington, Del. Architect, E. L. Rice, 815 Market street, Wilmington, Del. Owner, S. H. Baylard, Eighteenth and Jefferson street, Wilmington, Del. Brick, 3 stories and basement, 73x41 feet, slag roof, floors (electric and gas lighting reserved), tile work, 3 dumbwaiters. Plans in progress.

Organic Laboratory (add.), Wilmington, Del. Architect, private plans. Owners, E. I. Dupont de Nemours Co., Wilmington, Del. Brick, 2 stories and basement, 44x49 feet, slag roof, stone foundations, steam heating, electric lighting, concrete floors, hollow metal skylights, reinforced concrete work. Owners taking bids. H. D. Haddock & Co., 804 Orange street, Wilmington, Del., are figuring.

Storage Warehouse, Fifth and Walnut sts., Wilmington, Del. Architect, W. E. Haunce, 204 West Twenty-fourth street, Wilmington, Del. Owners, Retail Grocer Exchange, Fourth and Walnut streets, Wilmington, Del. Concrete and steel, fireproof, 3 stories and basement, 32x70 feet. Architect is taking bids. J. C. Healy & Son, 707 Tatnall street, Wilmington, Del., are figuring.

Miscellaneous Construction News

Naval Auxiliary Reserve School, Naval Training Station, Spec. 3303, Great Lakes, Ill. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick and reinforced concrete,

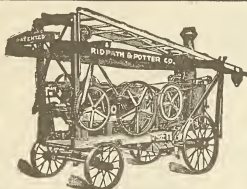
consists of (6) Barracks, (1) Dispensary Barrack, Executive Office, Mess Hall, Garage, Power House, Instruction Bldg., Swimming School, Guard House, Laundry and Armory, ready roof, cement floors, steam heating, electric lighting, yellow pine floors, metal lath,

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Residence (alt. and add.), Claymont, Del. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owner, E. H. Worth, Claymont, Del. Stone and frame, 2 stories, 28x40 feet, shingle roof, hot water heating, electric lighting, tile work, hardwood floors. Architects taking bids, due September 16th. H. E. Gran Co., 1707 Sansom street; Warren-

Moore Co., Colonial Trust Building, and Mr. Murphy, care of owner, are figuring.

Store (alts.), 32 West Third street, Wilmington, Del., \$2,000. Architect, private plans. Owners, Bernstein & Cohen, 32 West Third street, Chester, Pa. Brick, new front, flush bulk, tile and marble work. Contract awarded to R. H. Scroggins, Chester, Pa.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, 114 East Allegheny avenue, Philadelphia, \$1,000. Dr. Tomlinson (O), Front and Westmoreland street, Philadelphia, C. A. Bonner (C), 2838 North Front street, Philadelphia, Brick, alterations.

Office Building, 309 Walnut street, Philadelphia, \$1,500. Wm. Walter (O), care of Land Title and Trust Co., Broad and Chestnut sts., Philadelphia, F. B. Davis (C), 240 N. Sixteenth street, Philadelphia. Alterations.

Gymnasium, Fifteenth and Spring Garden streets, Philadelphia, \$4,400. Baldwin Locomotive Works (O), 500 North Broad street, Philadelphia, F. B. Davis (C), 240 North Sixteenth street, Philadelphia. Skylights, alterations, new maple floor, plastering.

Dwelling, 5513 Ridge avenue, Philadelphia, \$500. Wm. F. Morton (O and C), 5513 Ridge avenue, Philadelphia. Stone, 1 story, 7x27 feet, stone foundations.

Repair Shop, 1309 Carlton street, Philadelphia, \$2,500. Robert Grant & Son (O), 1574 Vine street, Philadelphia. John Welsh (C), 128 North Eleventh street, Philadelphia. 32x35 feet, 1 story, stone foundations, slag roof, cement floor.

Dwelling, 4925 Walnut street, Philadelphia, \$800. H. L. Smith (O), Philadelphia. LeRoy K. Smith (C), 4209 Chester avenue, Philadelphia. Brick, alterations.

Building, River Road and Leverinton street, Philadelphia, \$7,000. Wabash Mills, Inc. (O), on premises. E. H. Cuthbertson (C), 334 Roxboro, Philadelphia. Stone, 11x7 feet.

Storage Building, 1208-10 Frankford avenue, Philadelphia, \$1,400. Sovmcy Bros. (O and C), 1204 Frankford avenue, Philadelphia. Brick, 2 stories, 34x22 feet, stone foundations, slag roof.

Dwelling, Cresheim Road and Carpenter street, Philadelphia, \$1,250. J. W. Yum (O), on premises. Fred Elvidge & Sons (C), 5522 Germantown avenue, Philadelphia. Stone, 2 stories, 15x18 feet, metal lath.

Garage, 5210 Whitby avenue, Philadelphia, \$7,500. Atlantic Fuel Co. (O), on premises. H. W. Hartman (C), 4812 Chestnut street, Philadelphia. Brick, 1 story, 55x100 feet, stone foundations, cement floor.

Store, 146 North Eighth street, Philadelphia, \$490. John Cracker (O), on premises. Jenn J. Walters (C), 1536 Siles street, Philadelphia. Brick, alterations and bulks.

Hospital, Forty-fourth and Market streets, Philadelphia, \$1,500. Pennsylvania Hospital for Nervous Diseases (O), on premises. J. Morris Daniels (C), 252 South Juniper street, Philadelphia. Interior and exterior alterations, brick.

Building, 1427-33 Catherine street, Philadelphia, \$1,250. Abe Kolsky (O), 730 South Fifth street, Philadelphia. Solomon Bros. (C), 263 South Eighth street, Philadelphia. Repairing dangerous condition.

Garage, 1706 Jackson street, Philadelphia, \$1,400. A. Sonnefeld (O), Fifty-seventh and Catherine streets, Philadelphia. H. McCurdy

(O), 1925 McKean street, Philadelphia. Brick, 1 story, 19x49 feet, stone foundations.

Store and Dwelling, Thirteenth and Federal streets, Philadelphia, \$600. G. Foti (O and C), on premises. Brick, third story, 20x16 feet, slag roof.

Locker Room, Margaret and Bernhda sts., Philadelphia, \$3,000. Barrett Manufacturing Co. (O), Frankford, Philadelphia. Turner Concrete Steel Co. (C), 1713 Sansom street, Philadelphia. Reinforced concrete, 1 story, 40x50 x30 feet, slag roof.

Bungalow, Byberry Road and Bustleton, Philadelphia, \$4,800. Clara Gamble (O), on premises. Wm. D. Bubeck (C), Somerton, Pa. Frame, 1 story, 34x38 feet, shingle roof.

Dwelling, 810-12 South Darien street, Philadelphia, \$750. Frank Palumbo (O), on premises. Frank A. Bilotta (C), Seventh and Christian streets, Philadelphia. Brick alterations.

Dwelling, 4047 Palmetto street, Philadelphia, \$500. Wm. Richter (O), on premises. M. W. Kertsch (C), 6003 Eising Sun Lane, Philadelphia. Brick, 2 stories, 15x8 feet.

Office, Penrose avenue, south of Pennypacker street, Philadelphia, \$350. Pennsylvania R. R. Co. (O and C), Philadelphia. Frame, 1 story, 16x36 feet.

Shop, Church Lane and Lena street, Philadelphia, \$1,500. Hammill Spinning Co. (O). H. Chick (C), 170 East Walnut Lane, Philadelphia. Brick, 1 story, 40x30x8 feet, slag roof.

Repair Shop, Forty-ninth and Woodland avenue, Philadelphia, \$45,000. P. B. T. Company (O and C), 810 Dauphin street, Philadelphia. Consists of repairs and alterations.

Hotel, Eighteenth and Ridge avenue, Philadelphia, \$1,000. Ridge Avenue Farmers' Market (O), on premises. Carter Paving Co. (C), 641 North Eighteenth street, Philadelphia. Reinforced floor.

Garage, 6223 West Girard avenue, Philadelphia, \$500. John Marisolins (O and C), on premises. Brick, 1 story, 26x25 feet, slag roof, stone foundations.

Parish House, Eighteenth and Morris streets, Philadelphia, \$12,790. Archbishop Dougherty (O), Eighteenth and Race streets, Philadelphia. Wm. J. McShane (C), 417 South Thirteenth street, Philadelphia. Stone work, alterations.

Garage, Magnolia and Sharpnack street, \$300. John Michael DiPaul (O and C), 80 East Sharpnack street, Philadelphia. Stone, 1 story, 40x15 feet.

Residence, 3815 Chestnut street, Philadelphia, \$650. Weightman Estate (O), 1920 Market street, Philadelphia. J. Borden & Co. (C), 637 North Nineteenth street, Philadelphia. Furnaces.

Power House, Krame avenue and Pechin street, Philadelphia, \$2,500. Bennet & Aspen Co. (O), Manayunk, Philadelphia. Wm. Steele & Sons Co. (C), Sixteenth and Parkway, Philadelphia. Brick and timber, 1 story, 45x15 feet.

Dwelling, 3441 York Road, Philadelphia, \$900. Wm. H. Zimmermann (O), on premises. J. Y. Loux (C), 3731 York Road, Philadelphia. One-story addition, brick, stone foundation, cement floor.

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Dwelling, 1922-24 South Thirteenth street, Philadelphia, \$400. James Branchime (O and C), 1924 South Thirteenth street, Philadelphia. Brick, 1 story, 12x15 feet, stone foundations, slag roof.

Dwelling, 305 North Sixth street, Philadelphia, \$980. Reliance Insurance Co. (O), 431 Chestnut street, Philadelphia. F. G. English (C), 1605 North Carlisle street, Philadelphia. Repair fire damages.

Garage, 2610 Westmoreland street, Philadelphia, \$600. Ed. Hagerman (O and C), on premises. Brick, 1 story, 26x10 feet, slag roof, hardware.

Garage, Peirce and Orthodox streets, Philadelphia, \$800. N. Nagorsk (O and C), 2410 Orthodox street, Philadelphia. Brick, 1 story, 78x20 feet, stone foundations.

Dwellings, 331-33-35 North Fourth street, \$20,000. James L. Lockhardt (O), Fifth and Green streets, Philadelphia. Raith Const. Co. (C), 304 West Master street, Philadelphia. Brick, 1 story, 54x17 1/2 feet, lumber, plumbing, painting, skylights, slag roof.

Store and Dwelling, 1205-09 Market street, Philadelphia, \$2,800. Simon L. Bloch (O), 2131 North Broad street, Philadelphia. Edward Holland (C), 4935 Catherine street, Philadelphia. Brick, alterations.

Bank, 421-23 Chestnut street, Philadelphia, \$500. Philadelphia National Bank (O), on premises. L. F. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Consists of building bridge between two banks, brick, alterations.

Store, 1019-21 Market street, Philadelphia, \$4,800. Berg Bros. (O), 1019 Market street, Philadelphia. Central Electric and Heating Co. (C), Heed Building, Philadelphia. Steam heating.

Garage, Morten and Mechanic streets, Philadelphia, \$1,200. John C. Frick (O and C), 402 High street, Philadelphia. Brick, 1 story, 18x50 feet, sheet metal partitions.

Storage Building, Cabot street, south of York Road, Philadelphia. Charles F. Datz & Co. (O), 482 South Fifth street, Philadelphia. Henry MacMillan (C), Eighteenth and Thorpe Lane, Germantown, Philadelphia. Repair fire damages.

Shop, 2816 Bridge street, Philadelphia, \$700. Roller Casting Co. (O and C), 2816 Bridge street. Frame, 1 story, 35x44 feet.

Garage, 2940 North Eleventh street, Philadelphia, \$350. H. Vandergrift (O), on premises. H. P. Werner (C), 3245 Germantown avenue, Philadelphia. Brick, alterations, cement floor, steam heating.

Store and Dwelling, 1935 North Gratz street, Philadelphia, \$450. O. P. Patterson (O), 117 Rittenhouse street, Philadelphia. Wm. Sharp (C), West Haines and Wayne avenue, Philadelphia. Brick, alterations.

Dwellings (32), Fernhill and Apsley streets, Philadelphia, \$99,200. John H. McClatchey (O and C), Land Title Building, Philadelphia. Brick, 3 stories, 16x30 feet, slag roof, hot air heating.

would be most untimely to present for your consideration any proposal looking toward the prosperity of any single business or any single trade or even for the preservation of so important a national facility as the building industry in its entirety, for public welfare is intelligent self-interest, and the national welfare is now at stake. But the present and prospective national conditions make it appear to us that right at the present time we are justified in suggesting to you that the Federation of Building Industries, as a single great national unit, might serve a most valuable and important purpose to the national administration as a self-governing instrumentality possessing understanding of the country's requirements and having the efficiency for their execution.

We desire to make it very clear to you, Mr. Chairman, that this Executive Committee, representing the War Service Committee of the National Federation of Building Industries, does not seek, and will not seek, any means of shirking the duty or slighting the privilege of war sacrifice. This great industry, second only to agriculture in the number of men employed in its operation, is prepared to make any sacrifice of men, money and material necessary to win the war. This industry, as a whole, however, would very much like to feel that it enjoys the faith and confidence of the Government and to be placed in a position where it may, always subject to the country's war program, govern itself in the furtherance of national welfare. We believe that with the proper governmental aid and co-operation this federated industry can be of material assistance in speeding up and economizing Government work, and can at the same time husband and increase national resources.

To this end a definite point of contact between the Government and the building industry is essential, and to create such a point of contact we respectfully suggest for your consideration the creation of a governmental unit or board, with which the Federation may deal. Such a unit could co-ordinate all functions involved, for the benefit of the Government and the industry.

Duties of Building Industries.

Three principal duties under war conditions seem to devolve upon the building industries:

(a) Adequate resources in plant, material and service must be made promptly available for war needs.

(b) Plant and organization not now devoted to war work must be converted to war work to such extent as may be feasible and desirable.

(c) Labor, superintendence, plant and material, not now applied to war work, when not needed by the Government should be kept employed, meeting the construction needs of the civil population, maintaining the prosperity of those who might otherwise be idle and non-

CO-OPERATION BETWEEN BUILDING INDUSTRIES AND THE GOVERNMENT

Basis Suggested to Chairman Baruch, of the War Industries Board by the War Service Committee of National Federation

Under date of August 22, President Ernest T. Trigg, of the National Federation of Building Industries, addressed the following letter to the members of the Federation:

"Through the good offices of President Wheeler, of the Chamber of Commerce of the United States, an appointment was made with Hon. Bernard M. Baruch, chairman of the War Industries Board, for a conference with him this morning. Your Executive Board held a meeting beginning at 10 A. M. yesterday morning which lasted until midnight, at which a statement was prepared to be presented to Mr. Baruch this morning. The statement as made appears following this letter.

"The conference with Mr. Baruch resulted in his agreement to co-operate in arranging the further conference requested by your committee with responsible representatives of the six administrative governmental agencies referred to. Mr. Baruch's attitude was friendly and entirely frank. He went into some detail with your committee as to the present requirements of our Government and her Allies, pointing out that in his opinion the real test and strain ahead of us was one of national man power.

"Your Board believes that one of the most

encouraging results of the conference lies in the reference by Mr. Baruch to the creation of additional machinery relating to the general business building program of the country which at this time cannot be made public by your committee, but which shortly will be announced by the proper Federal authority. Your Board will keep in close contact with this additional machinery as created, and will keep you advised of its character and method of operation.

"Your committee is encouraged to believe that constructive progress has been made towards creating a proper point of contact between our industry and the Government through this agency and you shall be advised of further developments as they occur."

Statement to Chairman Baruch.

Hon. Bernard M. Baruch, Chairman,
War Industries Board,
Washington, D. C.

Sir:

Realizing the present need of our Government and its Allies for iron and steel, coupled with the pressing demand for fuel, and realizing the shortage of transportation and of labor in certain sections of the country, it

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productive, thereby preserving the industry as a national facility.

The War Service Committee, speaking with authority for the whole industry, is prepared to undertake this work. Where trades within the Federation have their individual war service committees we are equipped to co-ordinate them if necessary for particular occasions. In trades which have no such committees we are prepared to undertake their formation of, if necessary, to carry on the required negotiations for such trades, provided no conflict between two or more building interests is involved.

Six Agencies Regulate Building.

Permit us to call your attention to the fact that at the moment no less than six administrative governmental agencies exercise functions affecting building construction resources for war and civil purposes:

1. War Industries Board Priorities Committee.
2. War Industries Board, Resources and Conversion Section.
3. The Railroad Administration.
4. The Fuel Administration.
5. U. S. Employment Service of the Department of Labor.
6. Capital Issues Committee of the Federal Reserve Board.

The decisions of several or all of these agencies are part of one situation in most matters upon which the Federation would co-operate with the Government. If a ship-building concern requires workmen's dwellings, not only must the capital, transportation and labor be provided, but material is also required, which in turn calls for the use of fuel. To co-ordinate all six authorities in one board for consideration of building policies would not only harmonize action and expedite execution, but, through the consideration of the situation as a whole, might disclose pertinent aspects for dealing with which no means now exist.

We are sure you will appreciate the conditions and the motives which prompt us to say that, through the many organizations federated into this national association and through the thousands of experienced and thoroughly responsible and dependable men connected with it, actual facts and information essential to the Government's present needs can be gathered together more promptly, completely and reliably than in any other manner. These men have knowledge. They have experience. They have facilities for supplying data and skill in using or improvising such facilities. There are a large number of men throughout the building industry who by reason of prestige, caliber, adaptability and the qualities of leadership are in themselves a building industry "resource."

Permit us to call your attention to the fact that a great deal of confusion apparently exists at the present time in the mind of the

public as to the governmental policy affecting civil construction. It is the opinion of this committee that the Government's policy (to which policy we heartily subscribe) is that no civil construction should be sanctioned or permitted which will interfere with the national war program, but that civil construction at such places and times as it may be needed by the business and population of each community (when such construction does not interfere with the war program) should be sanctioned.

We believe you will agree with us that the same policy with regard to civil construction is not always applicable in every community throughout the country at the same time. It might well be true that civil construction interfered with war work in one region when it would not in another and in a given region at one time and not at another.

It is doubtful if the readjustment of industry to direct war work, even if continued for several years, would ever result in a complete absence, throughout the United States, of surplus resources necessary for meeting in part, at least, the construction needs of the civil population. While some materials will probably not be available until peace returns, others materials exist in surplus. Lumber, for instance, is being cut in ship lengths, under such circumstances that there is an enormous new by-product of lengths suitable for building. Many sawmills burn refuse for fuel; others use waterpower. The same is true of many factories.

Transportation is a simpler problem in building materials than in many other lines because the average haul is short. This is due to the weight of the goods. The cost of long hauls is prohibitive. Every population center draws its construction commodities from a nearby region. Such material is usually carried in cars returning from a loaded trip, which cars would otherwise be empty. One of the most promising and urgent purposes which can be pursued through co-operation of the building industry with the Government is the development of inland waterways, which are the natural highways for heavy freight for wartime use.

Notwithstanding the fact that labor has been taken from building trades and kindred industries for military and direct war industries service and that such industrial service, in some localities at least, is short of labor, reports from the Department of Labor indicate a continued idleness of skilled building artisans throughout the country, except in certain congested districts, particularly in the Atlantic Coast States and certain points on the Pacific Coast. The question of building construction labor for civil purposes might properly be classed as one for consideration at the individual locality at the time it may be required.

The aspect of investment has called forth the confusion of thought which usually at-

tends discussion of money and credit. May we be permitted to say in this connection that construction is affirmatively beneficial in war times. The negative side of this question consists of not obstructing the winning of the war, while the positive side is the advantage of helping war work and keeping ready for peace a vital national facility. A nation at war must be prosperous. The whole people must be employed, creating wealth with which to support the Army and Navy.

In most industries the conversion process to war work is gradual. Few who are not close to it realize how large a proportion of their neighbors are wholly or partly engaged in building. The number is so great that to hold any considerable part of them marking time would strain the strength of tradesmen, landlords and many others in every community of the country, weakening the people as tax payers, as bond buyers and as contributors to Red Cross and other relief funds.

Any community, moreover, which does no building seriously runs down at the heel in its housing for residents and business. In war as in peace, depreciation is constant; there is a real estate scrap heap. Even the stationary population has to have new dwellings and many other common types of structures or the community will suffer in health and morals from overcrowding, defective sanitation and general dilapidation at home and at work. It is apparent that the need, especially for dwellings, has in many parts of the country seriously overtaken the supply.

Not the least important reason for sanctioning civil construction when, where, and if war needs permit, is that the national interest requires the preservation of the building industries as a national facility. Many think the country pursued for several decades a mistaken policy affecting the merchant marine, only to encounter at last the necessity of creating a fleet under pressure at the highest cost and taxing the money out of the incomes of the people. Many likewise think the country followed an erroneous course affecting railroads with a somewhat similar result. The people pay. It would seem to be to our national interest to do all such things compatible with war needs (which must always come first) to prevent the disintegration and complete breaking down of the building industry, in order that the necessary mechanism should constantly be available to give our people necessary housing facilities.

(Continued Next Week)

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.

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Reference Directory for Architects, Builders and Owners

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Artesian Well Drilling Co.,	Real Estate Trust Bldg., Phila.	
Ridpath & Potter Co.....	Bourse Bldg., Phila.	
John B. Rulon.....	1355 Colwyn st., Phila.	
Artists' and Architects' Supplies.		
Chas. H. Robbins.....	125 S. 11th st., Phila.	
Warren-Knight Co.....	136 N. 12th st., Phila.	
F. Weber & Co.....	1125 Chestnut st., Phila.	
Blue Prints.		
Chas. H. Robbins.....	125 S. 11th st., Phila.	
F. Weber & Co.....	1125 Chestnut st., Phila.	
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Chas. H. Robbins.....	125 S. 11th st., Phila.	
Brick (Face, Etc.).		
O. W. Ketcham.....	Builders' Exchange, Phila.	
Brick Renovating.		
Adolph Christensen.....	1433 Brown st., Phila.	
Builders.		
Hogg Construction Co., Inc.,	1634 Sansom st., Phila.	
Mitchell Bros.....	2125 Race st., Phila.	
Pomeroy Const. Co.....	1609 Ranstead st., Phila.	
Builders' Supplies.		
P. H. Fairlamb Co.....	115 S. 30th st., Phila.	
David France Co.,	Tasker st. wharf, Delaware River, Phila.	
Builders' Equipment.		
Service Equipment Co.....	Bourse Bldg., Phila.	
Cement.		
P. H. Fairlamb Co.....	115 S. 30th st., Phila.	
David France Co.,	Tasker st. wharf, Delaware River, Phila.	
Lehigh Portland Cement Co.,	Finance Bldg., Phila.	
Columns (Metal).		
Pearce Fireproof Co.....	1345 Arch st., Phila.	
Composition Flooring.		
The Barrett Company,	New York and Philadelphia.	
Philadelphia Mineral Flooring Co.,	5633 Summer st., Phila.	
Woodoleum Manufacturing Co.,	203 Liberty Bldg., Phila.	
Dampproofing.		
The Barrett Co.....	New York City and Phila.	
Drawing Materials.		
Charles H. Robbins.....	125 S. 11th st., Phila.	
F. Weber & Co.....	1125 Chestnut st., Phila.	
Electrical Construction.		
Baird-Osterhout Construction Co.,	1620 Chancellor st., Phila.	
Elevators.		
A. B. See Electric Elevator Co.,	Colonial Trust Bldg., Phila.	
Engineers' Supplies.		
Charles H. Robbins.....	125 S. 11th st., Phila.	
Warren-Knight Co.....	136 N. 12th st., Phila.	
F. Weber & Co.....	1125 Chestnut st., Phila.	
Fences.		
Anchor Post Iron Works,	Real Estate Trust Bldg., Phila.	
Fire Doors.		
Merchant & Evans Co.,	2035 Washington ave., Phila.	
Fireproofing.		
General Fireproofing Co.,	832 Arch st., Phila.	
Henry S. Harris.....	Land Title Bldg., Phila.	
Pearce Fireproof Co.....	1345 Arch st., Phila.	
Truscon Steel Co.....	Commonwealth Bldg., Phila.	
Floor Plates.		
Alan Wood Iron and Steel Co.,	Widener Bldg., Phila.	
Furnaces and Ranges.		
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Henry M. Miller.....	46-48-50 N. 2d st., Phila.	
Richardson and Boynton Co	1332 Arch st., Phila.	
Granite.		
Holmesburg Granite Co.,	Commercial Trust Bldg., Phila.	
Hauling Contractors.		
Barber Contracting Co.,	1127 Land Title Bldg., Phila.	
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Insurance Co. of North America,	3rd and Walnut sta., Phila.	
Levels.		
Warren-Knight Co.....	136 N. 12th st., Phila.	
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Staman & Dickey.....	30 S. 16th st., Phila.	
Lumber.		
James E. Tague & Co.,	10th and Columbia ave., Phila.	
Marble Mosaic.		
Belf Bros. & Co.....	1923 Market st., Phila.	
Italian Marble Mosaic Co...	433 Spruce st., Phila.	
Metal Lath.		
General Fireproofing Co.,	832 Arch st., Phila.	
Pearce Fireproof Co.....	1345 Arch st., Phila.	
Truscon Steel Co.....	Commonwealth Bldg., Phila.	
Meters.		
Philadelphia Meter Co.,	Real Estate Trust Bldg., Phila.	
Mill Supplies.		
The Fairbanks Co.....	7th and Arch sts., Phila.	
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Keystone Supply & Mfg. Co.	913 N. 9th st., Phila.	
Preservatives (Wood and Concrete).		
The Barrett Co.....	New York City and Phila.	
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Borden Stove Co.....	1311-13 Arch st., Phila.	
Henry M. Miller.....	46-48-50 N. 2d st., Phila.	
Richardson & Boynton Co...	1332 Arch st., Phila.	
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Truscon Steel Co.....	Commonwealth Bldg., Phila.	
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The Barrett Co.....	New York City and Phila.	
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Audubon Wire Cloth Co., Inc....	Audubon, N. J.	

1792

1918

Insurance Company of NORTH AMERICA

PHILADELPHIA



126th Annual Statement	December 31, 1917
Cash Capital - - -	\$ 4,000,000.00
Reserve for Premiums - - -	10,630,740.40
Reserve for Losses - - -	4,419,000.00
Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders - - -	\$ 12,317,502.26
Losses Paid Since Organization - - -	192,518,273.33

The Oldest American Stock Insurance Company

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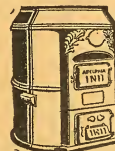
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PHILADELPHIA



When writing to advertisers, please mention THE BUILDERS' GUIDE.

Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 38
September 18, 1918

ISSUED WEEKLY IN THE INTERESTS OF ARCHITECTS, STRUCTURAL ENGINEERS,
CONTRACTORS AND THE MATERIAL AND EQUIPMENT TRADES

LESS THAN ONE YEAR
15 CENTS PER COPY



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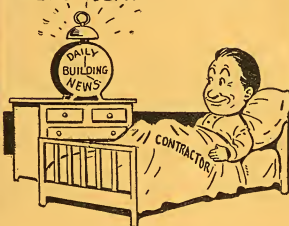


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Damp, Fire and Vermin Proof

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Whether applied by brush or machine, if done by our corps of trained artisans you are sure to get the best work at the lowest possible cost. Better see us today. "Let there be light."

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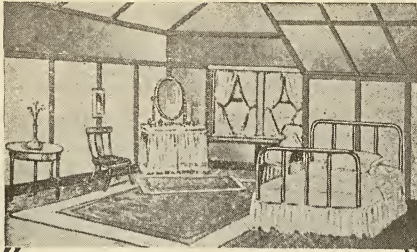
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(153)



HISTORY records that all great wars have been followed soon by periods of intense reconstruction. That the present war surpasses all others in magnitude and destructiveness only means that its sequel of reconstruction will also surpass all others in magnitude.

* * * * *

With the major portion of the world's cash in American hands, can there be any doubt that in this country construction of railroads, homes, factories, and utilities and luxuries of every kind will leap forward at an unprecedented pace?

* * * * *

The demand for everything of use or beauty is bound to be tremendous. * * * * *

The war has taught us that preparedness is really the longest word in the dictionary and also the strongest. We cannot start preparing for big business on the day peace is declared any better than we started preparing for war on the day we declared war. * * * * *

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—From an address by MR. GEORGE FRANK LORD,

Director of Advertising, E. I. Du PONT de NEMOURS & CO.

Building interests will dominate this reconstruction period.

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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 38

PHILADELPHIA
September 18, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide

PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

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Second Class Matter



As The Editor Sees It



PREPAREDNESS for reconstruction after the war is uppermost in the minds of wide-awake business paper editors, and a conference will be held in November at Chicago to discuss the whole question of business after the war. George H. Cushing, of *The Black Diamond*, has been made chairman of the Executive Committee, and he has prepared an article on the needs of business after the war treating of the importance of raw material, "with a sincere desire to save the nation from future disaster." Mr. Cushing says men are asking one another:

"What is to be the business situation after the war?"

There is still plenty to do before that question will be really urgent. Even so, the elements of victory have entered the struggle on the side of the Allies. It is probable that this period of destruction will end before our nation is organized to meet the problems which peace will bring. Therefore the question as to what business will face in peace times is vital to every man in America.

If we can imagine what is to come, the questions for immediate discussion are:

What can or should be done to simplify and improve conditions?

Shall we have an organized program for reconstruction?

Shall that be under the direction of the Government or some other agency?

If the Government directs the movement, what part shall it play in the period of reconstruction? Shall it substitute itself for business? Shall it be a partner

of business? Or, shall it merely act as a referee?

THE COMPLEX PROBLEM.

The subject is almost inconceivably big. Because we are confronted by competitive conditions at home and international considerations, it is so complex the danger is we will all lose ourselves in generalities and mere theories while discussing it.

That is, if we ask what is to be the business situation after the war, so many phases and possibilities present themselves it is easy to become lost in the maze of speculative and apparently conflicting data and opinion.

Or, if we abandon that field of conjecture and ask what part the Government shall play, we become involved at once in a political dispute which has raged for centuries; we lose the point while debating what is the proper function of the Government.

In either event, the danger is of merely starting an argument where the real need is to begin something constructive.

The obvious duty is to avoid too broad a generalization and to begin that analysis of the present and probable future situation which will lend itself readily to a synthetical treatment of the whole subject. It is going to be necessary—as we see it—to start with two groups of known and admitted facts. These will give us the groundwork of information upon which to build toward a proper line of action.

FOUR POINTS OF CONFUSION.

The first group of facts embraces:

Commodity prices to-day are from 100

to 500 per cent. above normal; they must in peace times return to normal in obedience to the law of supply and demand.

Labor is commanding an abnormal wage to-day and is congested, in wholly unnatural fashion, into certain communities; wages must come down and labor be more widely distributed.

Credits of business concerns are out of joint, due to the present abnormal earnings of some companies; the enforced suspension of some whole industries; and because the Government has commandeered the capital of the country for other purposes after the war. The whole credit system will have to be revised and each company given a new rating.

Normal relations between merchant and customer have been destroyed; they must be restored, preferably without an intervening period of unrest and disquiet.

In this group of facts we are not concerning ourselves with any international questions or speculations but with only those things which will confront every business man, namely: What shall I charge? What shall I pay my labor? Where may I borrow money? To whom and on what basis may I sell?

It is obvious that if we allow prices to return to normal by gravity; if we allow labor to distribute itself by the filtration process; if we establish credits by the banking method of studying the proved balance sheet on current business; and if we re-establish market relations by turning loose the forces of unrestrained competition, we have entered upon a period of readjustment which will not end until

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several years of depressed business have intervened.

That is to say, prices cannot come down by gravity except through a period of stagnation. Wages cannot be brought down to normal by gravity except through a period of unemployment. Credits cannot be re-established—in a way to satisfy the bankers—except by a prolonged study of the relation between the then current earnings and the invested capital in each concern. And, enduring relations between merchant and consumer cannot be firmly established until prices have again found their equilibrium. All of this means—unless these readjustments are hastened by organized effort of some sort—a prolonged period of unsettled business with depression as the most likely and natural expression of the times. One thing is obvious. War prices for commodities and labor cannot endure in peace times. War credits, without war profits, are impossible. And, when the governments stop buying, someone else must begin. These things make violent readjustments necessary.

That is the first group of facts with which we have to deal. It calls loudly for some organized effort keyed to avoid this wasteful delay which natural processes would involve. It calls loudly for a preparation-for-reconstruction movement which is as necessary now as was, recently, the preparation-for-war movement.

GETTING THE MONEY.

The second set of facts is somewhat more complex. Still, it is one which demands immediate attention. It starts with the known fact that, after the war, the Government will need vast sums of money which it cannot consistently raise by the flotation of bonds. Instead, it will have to begin to get, through taxation, money to retire outstanding bonds when they reach maturity.

It may, of course, be necessary to float a small bond issue to pay the enormous expenses of demobilization. That, however, will be part of the war expense and will be legitimate. Otherwise, further Government bond issues will be unpalatable. Thus the outstanding fact is that the Government will need to raise enormous sums of money.

This can only flow to the nation as a small percentage of the earnings of the people who are employed. Thus if the nation needs vast sums, the people must be earning much more. It is begging the question to say that this money can be advanced as an interim loan by the banks. They have a loaning power which is directly proportionate to the amount of business they are doing. The volume of business done by the banks is directly responsive to the activities of the people themselves. So, the revenue of the Government first and last is traced directly

back to the lucrative employment of its people.

To get a proper perspective on this subject of the money—the conditions being considered—it is necessary to go back into elementary considerations and center thought upon those things from which all wealth springs. At the start, it is necessary to eliminate from the preliminary discussion whole groups of business activity. By this process we reach the dependable bed rock of admitted fact. That is, we must analyze business until, by a process of elimination, we have found the mainsprings of all business activity. To get such bedrock—as we believe—it is necessary to divide all business roughly into two major groups, namely:

First—and most essential—those industries which have, in themselves, relatively small earning power but which *originate whole lines of business activity.*

Second—Those concerns which, when active, are rich but which *depend for their success on the previous activities in the first-mentioned group.*

For the sake of convenience, we shall call them the "originating industries" and the "dependent industries."

THE ORIGINATING INDUSTRIES.

In the group of "originating industries" we include those things which spring primarily from the soil. They are admitted—in both an academic sense and in fact—to be the source of all wealth.

First, in this classification is the farmer. His business is not lucrative in itself. Yet what he produces gives rise to long lines of activity—such as the manufactured products due to the working over of cereals, meats and cloth materials—which are producers of great wealth.

Second, there is the producer of iron ore. His business is elemental but his production starts into life a long chain of lucrative activities which culminate in the refinement of the production of finished steel.

Third, there is the producer of coal. The operator's activities are surely elementary. Yet his work yields a product which creates tremendous activity by inspiring commercial energy in one direction and which becomes the raw materials of the chemical industry in another direction.

It is possible to extend this list of originating industries by including the production of lumber, of clay products, of precious and semi-precious metals and of cement. Mere reiteration of details, however, does not increase the importance of the subject. But, out of such a trend of thought comes the one vital truth, that:

Since the source of wealth, primarily, is in the soil products and since prices and production of raw materials must be adjusted before the makers of finished material can proceed, the first line of attack

on any preparedness-for-reconstruction program must be the problem incident to the production of raw materials.

THE DEPENDENT INDUSTRIES.

Included in the "dependent industries" are those concerns which of necessity depend for their activity, if any, upon the previous activities of the other group. At the top of the list of the "dependent industries" are the railroads—and other transportation mediums—the banks and the merchandising houses. The railroads obviously cannot carry unless they have something to carry. The merchandising houses cannot sell unless they have something to sell. And, the banks cannot collect and lend money unless someone is first making it. So, these are essentially dependent industries.

Beginning with them as a base, we could, if it were advisable, go through a long list of luxuries and semi-luxuries which properly belong in this "dependent" class. They all trace back to the same root, however; they can do nothing until there is activity in the originating group—the concerns which work in the soil.

THE GREAT TASK

With the relationships and interdependencies thus established, we are ready for a discussion of what is the proper starting point for concerted action to simplify future business.

It must be realized that we Americans have a task before us which is almost as difficult, as it would be to start from the beginning to build something new. Indeed, the more highly organized world has a harder job than has Russia. The organized business world must first tear down an established but abnormal order of things and then build something out of the fragments. On the contrary, Russia has merely to begin at practical zero and, by the employment of energy only, build a system of action on her admitted abundance of raw material. The organized world therefore has the harder work to do because it must first tear down and then build up.

IMPORTANCE OF RAW MATERIAL.

It goes without saying that raw material is essential to any reconstruction period. Indeed, the success of any constructive effort rests first and solely upon an available supply of raw material. That is so elementary it needs no further comment.

But, there is another factor in the present situation which is of first importance. That is that the world will emerge from this war with the old ship owners in about the same relative positions to each other that they occupied before. Great Britain has suffered serious losses of tonnage through the submarine, but she is regaining. And, the new tonnage will be better than the old. France has a definite inspir-

(Continued on Page 530.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Factory Building, northeast corner of Darien and Noble street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, S. Rosenau Company, on premises. Brick and reinforced concrete, 1 story, 23x60 feet, slag roof, concrete floor, electric lighting. Architect taking bids, due September 19th. Stacy Reeves & Sons, 2011 Market street; Smith-Hardican Co., 1606 Cherry street; Lam Building Co., 1001 Wood street; Wark & Co., 1737 Filbert street; W. O. Springer, 1024 Latimer street, are figuring.

Warehouse (alts. and add.), Second and Calowhill streets, Philadelphia. Architect, Carl Wolf, Thirty-first and Jefferson streets, Philadelphia. Owners, Delaware Storage and Freezing Co., on premises. Steel and concrete, addition to engine room, cooling tower. Architect taking bids, due September 18th. F. A. Havens Co., 845 North Nineteenth street; A. R. Raff Cont. Co., 1635 Thompson street, and Wm. Linker Co., 831 Cherry street, are figuring.

Residence (alts. to Apartments), southwest corner of Broad and Tasker streets. Architects, A. J. Sauer & Co., and H. Lewis Shay, associated, 130 South Fifteenth street, Philadelphia. Owner, Harry T. Reynolds, 1343 S. Tenth street, Philadelphia. Alterations changing residence to apartments. Brick and stone, cement work, tin and slag roof, hardwood floors, metal lath, steam heating, electric lighting, tile and marble work. Architects taking bids, due September 18th. Daniel J. McNamee, 1621 North Fifteenth street; F. G. Stewart, 1619 Sansom street; Stewart Bros., 2526 North Orkney street; Stacy Reeves & Son, 2011 Market street; J. Sims Wilson Co., 1125 Brown street, and Lam Building Co., 1001 Wood street, are figuring.

Apartment House (alt. and add.), Sixteenth and Poplar streets, Philadelphia. Architects, Ponckert & Wunder, 310 Chestnut street, Philadelphia. Owner's name withheld. Brick and stone, 3 and 4 stories, slag roof, hardwood floors, tile and marble work (heating, plumbing and electric work reserved). Architects taking bids. Frank I. Wintz, 1618 North Twenty-seventh street, is figuring.

Tool Hardening Building (alt. and add.), Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Col. Samuel Hof, Frankford Arsenal. Brick, 1 story, ready and tin roof, cement floors, rolled steel sash. Owners taking bids, due September 18th. Wm. R. Dougherty, 1610 Sansom street, and W. W. Anstine & Co., 1218 Filbert street; Wm. Steele & Sons Co., Sixteenth and Parkway; Ketcham & McQuade, 1029 Brown street, are figuring.

Residence (alt. and add.), Sherman and Carpenter streets, Philadelphia. Architect, J. Horace Frank, Real Estate Trust Building, Philadelphia. Owner, Arthur Gibson, on premises. Brick and plaster, 2½ stories, 30x40 feet, tin roof, stone foundations, hardwood floors, hot water heating, electric lighting. Architect has received bids.

Machinery and Electric Shop, Philadelphia, Spec. 3345. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will advertise for bids.

Hangar, Spec. 3357, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 617 G street, Washington, D. C. Plans in progress. Owners will advertise for bids.

Warehouse, northeast corner of Front and Wilsey streets, Philadelphia. Architect, Fred N. Greisler, Lafayette Building, Philadelphia. Owners, Kensington Waist Manufacturing Co., care of architect. Brick (slow burning construction), 2 stories, 69x100 feet, slag roof, cement and plank floors, electric wiring. Architect is taking sub-bids.

Structural Shop, Smithery, Machine and Electric Shop, Spec. 3420, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will take bids.

Aircraft Factory, Pier and Boat House, Spec. 3421, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will take bids.

Emergency Hospital Buildings, Spec. 3297, Gray's Ferry Road, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hospital Corps Barracks (2), 2 stories, 118x164 feet; Nurses' Quarters, 3 stories and basement, 192x65 feet; Subsistence Building, 1 story, 142x45 feet and 34x79 feet; Boiler House and Laundry, 2 stories and mezzanine floor, 67x48 feet; Wards (8), 2 stories, 113x190

feet; Observation Ward, 2 stories, 39x190 feet; Officers' Ward Building, 2 stories, 107x34 feet; Shed, 1 story, 80x30 feet, frame, hollow tile, brick, concrete foundations, ready and slag roof, composition and cement floors, metal lath, ventilators, fireproof and tinclad doors, kalamein doors, steam heating, electric wiring. Lowest bid submitted by Melody & Keating, 1322 Race street, Philadelphia, \$427,441.

Seaplane Hangar, Navy Yard, Philadelphia, Spec. 3341. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, asbestos covered metal walls, 200x150x50 feet, concrete foundations, wood piles, composition roof, concrete floors, electric lighting, rolled steel sash, asbestos covered doors. Low bidders: George F. Pawling Co., 1432 South Penn Square, Philadelphia, \$205,927; Warren-Moore Co., Colonial Trust Building, Philadelphia, \$217,000.

Freeman Building (alts.), Twelfth and Walnut streets, Philadelphia. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Banks Business College, 925 Chestnut street, Philadelphia. Six stories, masonry partitions, vapor heating, electric lighting, tile and terrazzo work, hardwood floors. Jacob F. Myers & Sons Co., Witherspoon Building, are taking sub-bids.

Factory (alts. and add.), 1024 Buttonwood street, Philadelphia. Architects, Ponckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Elliott-Fischer Co., 1017 Race street, Philadelphia. Brick (slow burning construction), 2 stories and basement, slag roof (steam heating, electric lighting and plumbing reserved). Architects taking bids, due September 20th. F. I. Wintz, 1618 North Twenty-seventh street; H. E. Grau Co., 1707 Sansom street, and M. W. Young, Overbrook, Philadelphia, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Manufacturing Building, Mermaid Lane and P. and R. R. R., Philadelphia, \$15,000. Architect, private plans. Owners, Varnall-Warick Company, Chestnut Hill, Philadelphia. Brick, 1 story, 128x40 feet, slag roof, cement floors, rolled steel sash (heating, plumbing and electric lighting reserved). Contract awarded to R. C. Ballinger & Co., 218 North Thirteenth street, Philadelphia.

Signal Towers (2), Battery Houses (2), Erie avenue yard, Philadelphia. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway

Co., Reading Terminal. Concrete, brick and steel, terra cotta coping. Towers, 2 stories, 17x22 feet; Office, 17x26 feet and 17x21 feet; Battery Houses, 1 story, 10½x19½ feet and 10½x17½ feet, asbestos and slate roof, cement and yellow pine floors, dampproofing, steel doors and partitions, hot water heating, electric wiring. Contract awarded to Chas. C. Pace, Merion, Pa.

Repairs to Train Shed Roof, Reading Terminal, \$50,000. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway, Twelfth and

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ROOFING and STRUCTURAL SLATE

Market streets, Philadelphia. Sheet metal work. Contract awarded to F. W. Van Loon, Denekla Building, Philadelphia.

Residences (576), Oregon avenue Tract, Philadelphia. Architects, Rankin & Crane, 1012 Walnut street, Philadelphia. Owners, Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Stone and brick, reinforced concrete foundations, cement floors, crushed slate, asphalt shingle and composition roofs, warm air heating, steam heating, electric wiring, skylights, iron fences and posts. Contract awarded to Roydhouse-Arey Co., 112 North Broad street, Philadelphia.

Emergency Hospital Buildings (15), Navy Yard, Spec. 3334, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Nurses' Quarters, 3 stories, 248x62 feet; Sub-stance Building, 2 stories, 202x60 feet; Barracks (2), 2 stories, 117x30 feet; Administration Building, 2 stories, 60x30 feet; Observation Ward, 2 stories, 173x38 feet; Wards (8), 2 stories, 173x118 feet; Barage, 1 story, 30x20 feet, frame, brick, hollow tile, stucco, wood piles, ready, slag and canvas roof, composition, cement and yellow pine floors, metal lath, elevators, ventilators, metal window guards, kalamain doors, galvanized steel skylights. Contract awarded to Wm. R. Dougherty, 1610 Sansom street, 652,000.

Building (extensions), Navy Yard, Philadelphia, \$6,500. Architect, private plans. Owners, U. S. Government, care of DeWitt C. Webb, Navy Yard, Philadelphia. Frame, covered boardwalks and porch enclosures. Contract awarded to Thos. C. Trafford, 1613 Sansom street, Philadelphia.

Garage (alts. and add.), Johnson and Jefferson streets, Germantown, \$5,000. Architect, private plans. Owner, Geo. Malloy, 1419 Spring Garden street, Philadelphia. Brick, 1 story, 80x80 feet, slag roof. Contract awarded to H. H. Burcell, 206 South Quince street, Philadelphia.

Manufacturing Buildings (2), State Road and Conly street, Philadelphia, \$20,000. Archi-

teet, Frank R. Watson, 1211 Walnut street, Philadelphia. Owners, Super Glass Co., on premises. Frame, 1 story, 106x48 feet, 46x78 feet and 46x48 feet, stone foundations, electric lighting, cement floors, slag roof. Contract awarded to Walter R. Potts & Bro., 1023 Wood street, Philadelphia.

Extension to Testing Room and Locker Room, Midvale, Philadelphia, \$4,000. Architect, private plans. Owners, Midvale Steel Corp., Widener Building, Philadelphia. Brick and concrete, 1 story, concrete foundations, steam heating, electric lighting, slag roof. Contract awarded to George C. Dietrich, 1010 Penn Square Building, Philadelphia.

Storage House (alts.), 1002-1012 Diamond street, Philadelphia, \$2,000. Architect, private plans. Owners, Miller Storage Co., on premises. Brick, general interior alterations. Contract awarded to Frank I. Wintz, 1618 North Twenty-seventh street, Philadelphia.

Engine House, Gray's Ferry Road, Philadelphia, \$60,000. Architect, private plans. Owners, Pennsylvania R. R. Co., care of C. E. C. A. Shand, Broad Street Station, Philadelphia. Brick, steel and concrete, 6 stalls, slag roof, concrete floors, rolled steel sash. Contract awarded to T. L. Eyre, Commercial Trust Building, Philadelphia.

Factory (fire repairs), Beach and Poplar streets, \$50,000. Architect, private plans. Owner, Clayton W. Nickols, on premises. Brick, steel, slow burning, 2 stories, 80x120 feet, slag roof, rolled steel sash, fire doors (plumbing, heating and electric work reserved), sprinkler system, concrete work, steel frame for wood tank. Contract awarded to F. L. Hoover & Sons, 1023 Cherry street, Philadelphia.

Manufacturing Buildings, Cambria street, east of Eighteenth street, Philadelphia, \$51,000. Architect, private plans. Owners, Linde Air Products Co., Forty-second street building, New York City. Brick, 1 story, 141x40 feet, garage, 1 story, 36x22 feet, lime house, brick, 1 story, irregular in size, concrete roof, electric lighting, stone foundations. Contract awarded to W. W. Lindsay & Co., Harrison Building, Philadelphia.

Pa. Work contemplated. General interior alterations.

Garage, Lehighton, Pa., \$2,000. Architect, L. S. Jacoby, 510 Hamilton street, Allentown, Pa. Owner, W. B. Drummheller, 249 S. Third Lehighton, Pa. Stucco, 1½ stories, 18x20 feet, slag roof, hollow tile. Work contemplated.

Residences (3), Kepler Station, West Easton, Pa., \$3,000 each. Architect, private plans. Owners, Beimer & Smith Pencil Manufacturing Co., Kepler street, Easton, Pa. Brick, 2 stories, various sizes. Plans in progress.

Church, Northampton Heights, South Bethlehem, Pa. Architect, A. W. Leh, Fourth and Broadway, South Bethlehem, Pa. Owners, Stork E. L. Church, care of George Prokok, 1701 East Third street, South Bethlehem. Brick and stone, 1 story and basement, 60x37 feet, slate roof, concrete foundations, steam heating, electric lighting, hardwood floors. Chairman, George Prokok, 1701 East Third street, South Bethlehem, Pa., is taking bids.

Club House, Third and Spruce streets, Easton, Pa. Architect, A. W. Leh, Fourth and Broadway, Bethlehem, Pa. Owners, Bethlehem Steel Corp., South Bethlehem, Pa., and U. S. Government, care of Otto Edlitz, 613 G street, N. W., Washington, D. C. Brick and stone, 3 stories, 109x135 feet, slag roof, concrete foundations, steam heating, electric lighting, tile, marble and terrazzo work, hollow metal skylights, concrete and hardwood floors. Plans in progress.

Residence, Fourth and Iron streets, Lehighton, Pa. Architect, L. S. Jacoby, 510 Hamilton street, Allentown, Pa. Owner, W. B. Drummheller, 249 South Third street, Lehighton, Pa. Stucco and hollow tile, 2 stories, 28x44 feet, tile roof, concrete foundations, electric lighting, hardwood floors. Owner is taking bids.

Residence, Bethlehem, Pa., \$10,000. Architect, A. W. Leh, Fourth and Broadway, Allentown, Pa. Owner, F. A. Krous, 28 South Main street, Bethlehem, Pa. Brick and stucco, 2½ stories, 18x38 feet, slate roof, stone foundations, electric lighting, hardwood floors. Owner is taking bids.

Store and Apartments (alts.), 316 Penn street, Reading, Pa., \$5,000. Architect, C. J. Young, 249 Jameson Place, Reading, Pa. Owner, J. D. Neff, on premises. Brick, second floor alterations, plumbing, electric lighting and hardwood floors. Owner is taking bids.

Residence (alt. and add.), Haverford, Pa. Architect, C. W. Churchman, 1525 Locust st., Philadelphia. Owner's name withheld. Stone and stucco, addition, brick and stucco, 16x20

PENNSYLVANIA

Construction News

Hotel (int. alts.), "Wyandotte," Fourth and Wyandotte streets, Bethlehem, Pa., \$8,

000. Architect, private plans. Owner, Aaron Potruch, 421 East Third street, Bethlehem,

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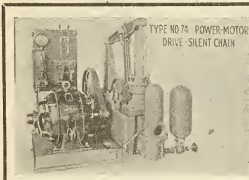
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feet, tin roof, hardwood floors, hot air heating, electric lighting, tile work, plumbing. Architect taking bids, due September 23rd. Gray Bros., Rosemont, Pa.; Alfred James, Bala, Pa.; Henry P. Wolf, Haverford, Pa., and W. John Stevens, Wyncote, Pa., are figuring.

Office and Apartment Building, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut st., Philadelphia. Owner's name withheld. Brick, stone and terra cotta, 2 stories, 36x100 feet, stone foundations, hot water heating, combina-

tion lighting, tile and marble work, roof undecided, hardwood floors. Plans in progress. Owner will take sub-bids in two weeks.

Store and Apartments, West Third street, Chester, Pa. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick and stone, 2 stories, 20x100 feet, slag roof, stone foundations, hot water heating, combination lighting, tile work, hardwood floors, metal bulks. Plans completed. Owner will take bids.

Navy Department, Washington, D. C. Frame, 1 story, 110x200 feet, ready roofing, concrete foundations, cement floor, roof ventilators. Lowest bid submitted by Lam Building Co., 1001 Wood street, Philadelphia, \$17,439.

Water Supply and Sewer System, Naval Base, Sepee, 3386, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hot water circulating and steam systems, electrical distribution system, piping, etc., electric wiring. Owners taking bids, due September 23rd. Cramp & Co., Denekla Building, Philadelphia, are figuring.

Marine Barracks, U. S. Radio Station, Tuckerton, N. J., Spec. 3404, \$32,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C., or Commandant, Philadelphia Navy Yard. Frame and reinforced concrete, 1 story, 35x134 feet, 2 wings, 35x35 feet each, and 1 wing, 28x32 feet, ready roof, concrete and yellow pine floors, electric lighting, roof ventilators, waterproofing. Owners taking bids, due September 23rd at 11 A. M. John M. Yardley, 1716 Sansom street, Philadelphia, additional bidder.

Power House, Section Base, Cape May, N. J., Spec. 3406. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 617 G street, Washington, D. C. Plans in progress. Owners will advertise for bids.

Piggery, Vineland, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Institution for Feeble-Minded Women, care of Dr. Hallowell, chairman, Vineland, N. J. Frame and concrete. Plans in progress.

Double Tenement (alts.), Bordentown, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Manual Training and Industrial School for Colored Youth, Bordentown, N. J. Frame and stucco, 2½ stories, 27x45 feet, shingle roof, steam heating, electric lighting. Lowest bidder, Chas. Fennimore, Bordentown, N. J.

Cow Barn (add.), Vineland, N. J. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, Institution for Feeble-Minded Women, care of Dr. Hallowell, Vineland, N. J. Hollow tile and stucco, 1 story, 36x82 feet, slate roof, cement floors, concrete foundations, electric lighting, roof ventilators. Plans in progress.

General Storehouse, Spec. 3346, Cape May, N. J., \$36,750. Architect, private plans. Owners, U. S. Government, care of C. W. Parks,

PENNSYLVANIA Contracts Awarded

Residences (20), Lansford, Pa. Architect, Calvin Young, 249 Jameson Place, Reading, Pa. Owners, Lehigh Coal and Navigation Co., care of Wm. Warriner, C. E., Lansford, Pa. Brick, 2½ stories, concrete foundations, hot air heating, electric lighting, pine floors. Contract awarded to Chas. H. Schlegel, Mt. Penn, Pa.

School, New Columbus, Carbon County, Pa. Architect, Calvin J. Young, 249 Jameson Place, Reading, Pa. Owner, Lehigh Coal and Navigation Co., care of Wm. Warriner, Lansford, Pa. Brick, concrete foundations, hot air heating, electric lighting, pine floors. Contract awarded to Charles H. Schlegel, Mt. Penn, Pa.

Storehouse, Bag and Ammunition Filling House, Spec. 3288, Fort Mifflin, Pa. Architect, Calvin J. Young, 249 Jameson Place, Reading, Pa. Care of C. W. Parks, Chief, 617 G street, N. W., Washington, D. C. Brick, hollow tile and concrete, 1 story, 30x166 feet and 30x142 feet, slag roof, concrete foundations, cement floors, electric lighting, hollow metal sash, roof ventilators. Contract awarded to Hagen Lumber Co., Seranton, Pa., \$37,980.

Engine House, Rutherford, Pa., \$100,000. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Company, Reading Terminal, Philadelphia. Brick, steel, reinforced

concrete, terra cotta coping, 1 story, 132x114 feet, concrete foundations, asbestos roof, concrete floors, metal lath, rolled steel sash, ventilators, concrete pit, 150x4 feet. Contract awarded to A. L. Carhart, Penfield Building, Philadelphia.

Stores (4), Fort Mifflin, Pa. Spec. 3187, \$140,028. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, 617 G street, N. W., Washington, D. C. Brick or tile walls, 1 story, 250x60 feet each, slag, asphalt or asbestos roof, concrete floors, hollow tile, electric lighting, glazed steel sash, concrete foundations, metal covered doors, roof ventilators. Contract awarded to J. S. Rogers Co., Drexel Building, Philadelphia.

Battery House, Belle Meade, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal. Brick and concrete, 1 story, 18x40 feet, J-M roof, cement floors. Contract awarded to Charles C. Pace, Merion, Pa.

Stable and Barn, near Downingtown, Pa. Architects, Bailey & Bassett, 421 Chestnut st., Philadelphia. Owner, J. Gibson McIlvain, Jr., Crozer Building, Philadelphia. Frame, 1 story and loft, slate roof, cement floor, electric lighting. Contract awarded to Milton W. Young, Overbrook, Pa.

NEW JERSEY Construction News

Seaplane Storage Building, Spec. 3381, Gloucester, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks,

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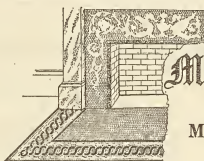
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Warehouse, 432 Manning Street, Philadelphia

Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, concrete, hollow tile and stucco, 1 story, 120x105 feet, ready or tin roof, wood and cement floors,

hollow tile, metal lath, steam heating, electric lighting, roof ventilators, wood foundations. Lowest bid submitted by Cramp & Co., Denekla Building, Philadelphia.

NEW JERSEY Contracts Awarded

Battery House, Manville Junction, N. J. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading Railway Co., Reading Terminal, Philadelphia. Brick and concrete, 1 story, 18x40 feet. Contract awarded to Charles C. Pace, Merion, Pa.

Faint Shop, Camden, N. J., \$40,000. Architect, private plans. Owners, Public Service Co., care of William Bidwell, Newark, N. J. Brick, steel and concrete, 1 story, slag roof, concrete foundations and floors, roof ventilators, electric lighting. Contract awarded to J. S. Rogers Co., Drexel Building, Philadelphia.

Training Headquarters (on the Loop), New York Shipyard, Camden, N. J. Architect, private plans. Owners, Public Service Co. of Camden, care of D. G. Knight, Newark, N. J. Frame, 1 story, 30x144 feet, shingle roof, concrete foundations, concrete floors. Contract awarded to Mockett Const. Co., Sixth and Market streets, Camden, N. J.

Waiting Station and Trolley Platform, Broadway and Morgan streets, Camden, N. J. Architect, private plans. Owners, Public Service Co. of Camden, care of D. G. Knight, Newark, N. J. Frame, 1 story, 41x9 feet, concrete foundations, asbestos shingle roof, concrete floors. Contract awarded to Mockett Const. Co., Sixth and Market streets, Camden, N. J.

Garages (5), rear 1218-1220 Princess avenue, Camden, N. J., \$18,000. Architect, private plans. Owner, H. R. Kuehner, 1220 Princess

avenue, Camden, N. J. Brick, 1 story, 8x17 feet each, slag roof, concrete floors, electric lighting. Contract awarded to Emil Schulke, 1183 Jackson street, Camden, N. J.

Garage, 497 West State street, Trenton, N. J. Architects, Fowler & Seaman, Broad Street Bank Building, Trenton, N. J. Owner, H. Hall Katzenbach, on premises. Brick, 2 stories, 24x30 feet, slate roof, concrete floors, electric lighting (heating reserved). Contract for masonry awarded to S. W. Mather & Son, Trenton, N. J. Contract for carpentry awarded to Edw. La Rue, Trenton, N. J.

Dwelling, Jannett street, Trenton, N. J., \$3,000. Architect, private plans. Owner, Jas. Barolone, Trenton, N. J. Hollowtile, 2 stories, 17x28 feet, concrete foundations, slate roof, steam heating, electric lighting. Contract awarded to James Barolone, Trenton, N. J.

Superintendent's Cottage (alts.), Bordentown, N. J., \$7,500. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owners, State of New Jersey, care of Superintendent Valentine, Bordentown, N. J. Frame, 2 stories, 32x45 feet, shingle roof. Contract awarded to Fennimore & Firth, Bordentown, N. J.

Plant and Angle Shop, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Frame, temporary construction to replace building destroyed by fire. Contract awarded to Hugh Nawn Const. Co., Boston, Mass.

Miscellaneous Construction News

Fuel Oil Storage Plant and Equipment, Spec. 3269, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Boiler House, 3 stories, 65x47 feet, steel frame, concrete floor, slag roof, metal lath, steel sash, metal covered doors, ventilators. Heater

House, frame, galvanized sheet steel roofing and siding, mechanical and electrical equipment, piping, etc. Lowest bid submitted by F. W. Mark Cont. Co., Finance Building, Philadelphia, \$570,000.

U. S. Naval Training Camp and Hospital Buildings (341), Spec. 3356, Hampton Roads, Va. Architect, private plans. Owners, U. S.

ARTESIAN WELLS DRILLED



Test Borings
Soundings

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Philadelphia, Pa.

Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick, reinforced concrete, steel, ready, slag, tin and canvas roofs, concrete, asphalt and composition flooring, hollow tile, metal lath, galvanized steel skylights, ventilators, dumbwaiters, laundry and kitchen equipment. Lowest bidder, John Gill & Son, Cleveland, O., \$3,449,750.

Manufacturing Buildings (alts. and add.), Long Island City, N. Y. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, U. S. Gas Defense Co., Second and Jackson street, Long Island City, N. Y. New concrete stairways, ventilating, composition roofing, bridges between buildings. Architects are sub-letting all contracts.

Building 'F' and Nurses' Quarters, Spec. 3371, Brooklyn, N. Y., \$650,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick and reinforced concrete, 4 stories, 156x275 feet, and 3 stories, 156x276 feet, composition roof, concrete and composition floors, hollow tile, metal lath, safety treads, waterproofing, steam heating, electric lighting, tile and marble work, rolled steel sash, galvanized steel skylights, tin clad and kalaminc doors, iron stairs. Owners taking bids, due September 23rd. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Torpedo Assembling Plant, Alexandria, Va., \$950,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Owners will take bids in one week.

Mill Building, Genesee and Deat streets, Buffalo, N. Y. Architect, W. E. S. Dyer, Land Title Building, Philadelphia. Owners, Monarch Knitting Co., Ltd., Buffalo, N. Y. Reinforced concrete and fireproof brick. Dye House, Bleach House, Power House, Chimney Foundations, Covered Passageway, Elevator Shaft, etc., 1 story, 111x55 feet, concrete foundations, cement floors, metal lath, slag roof, fire doors, roof ventilators. Contract awarded to Robert E. Williams, Buffalo, N. Y.

Round House, Emporium Junction, N. Y., \$60,000. Architect, Wm. C. Cookman, Broad Street Station, Philadelphia. Owners, Pennsylvania R. Co., Broad Street Station, Philadelphia. Frame and concrete, 6 stalls, concrete foundations, slag roof. Contract awarded to Roydhouse-Arey Co., 112 North Broad street, Philadelphia.

A retailer may fool himself by failing to charge all of his expenses into his cost of doing business, but his expenses will come out of his gross profits just the same.—E.R.

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Maryland

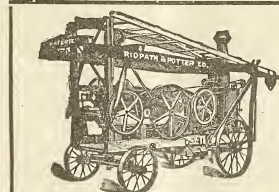
Contracts Awarded

Hospital, Information and Employment Buildings, Highlandtown, Md. Architect, O. G. Simonsou, Maryland Casualty Tower Building, Baltimore. Owners, Crown Cork and Seal Co., 1501 Guilford avenue, Baltimore. Brick, 3 stories, 1 story and 2 stories, stone trim, slag roof, steam heating, electric lighting, steel and iron work, ornamental iron work, steel sash, metal doors, hollow metal skylights, metal ceilings, skylights, ventilators, fireproofing, dampproofing, terra cotta work, hollow tile, tile, slate and terrazzo work, composition floors. Contract awarded to West Const. Co., American Building, Baltimore, Md.

Chemical Plant, Race and Winder streets, Baltimore, Md., \$200,000. Architect, private plans. Owners, General Chemical Co., Munsey Building, Baltimore. Reinforced concrete, steel and brick, 3 stories, 115x221 feet, asbestos roof, steam heating, electric lighting, steel sash, metal doors, hollow metal skylights, roof ventilators, fireproofing, dampproofing, terra cotta, hollow tile, composition floors, elevators. Contract awarded to Westinghouse, Church, Kerr & Co., 80 Wall street, New York City.

Service Station, Columbia avenue and B. & O. R. R., Baltimore, Md. Architect, private plans. Owners, United Railways, Continental Building, Baltimore. Concrete foundations, frame, composition roof, electric lighting, steam heating. Contract awarded to Singer-Pentz Co., Equitable Building, Baltimore, Md.

Church (alts.), Homewood avenue and Chase street, Baltimore, Md. Architect, private



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487 Bourse Building
Philadelphia, Penna.

plans. Owners, Greek Orthodox Congregation, on premises. Interior alterations, tile and terrazzo work, plastering and painting. Builder, G. Walter Tovell, 401 McCulloh street, Baltimore, taking sub-bids.

Store (alts.), 417 North Howard street, Baltimore, Md., \$6,000. Architect, John R. Forsythe, 232 St. Paul street, Baltimore. Owners, H. R. Eisenbrandt & Sons, Inc., 306 North Howard street, Baltimore. Consists of new front, metal bulk, pipeless hot air heating, electric lighting, metal ceilings, skylights, ventilators, fireproofing, plastering, painting, plumbing, tile and terrazzo work, composition floors. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore.

Round House, Machine Shop, Perryville, Md., \$60,000. Architect, private plans. Owners, Pennsylvania R. R. Co., care of C. E. Shand, Broad Street Station, Philadelphia. Concrete and steel, slag roof, concrete floors, rolled steel sash. Contract awarded to John Goll & Co., 1539 Filbert street, Philadelphia.

phia, \$1,550. A. Abramson (O), on premises. M. Yelland (O), 712 North Franklin street, Philadelphia. Brick, 1 story, 14x6 feet, slag roof.

Dwelling, 1350 Hunting Park avenue, Philadelphia, \$400. Arthur Otto (O), on premises. J. Sims Wilson Co. (C), 1125 Brown street, Philadelphia. Brick, alterations, new window.

Apartment House, Thirty-eighth and Ludlow streets, Philadelphia, \$600. Weightman Estate (O), 1524 Chestnut street, Philadelphia. James S. Talley (C), 1931 Market street, Philadelphia. Repair fire damages.

House, 144 North Eighth street, Philadelphia, \$1,000. J. D. Lit (O and C), Glenside, Pa. Alterations.

Moving Picture Theatre, 2805-07 Dauphin street, Philadelphia, \$2,850. Rev. D. D. Gibson (O), care of Dauphin street Baptist Church, on premises. Bass & Brenger (C), 2914 Ridge avenue, Philadelphia. Brick, alterations.

Store, Manayunk and Conaroc streets, Philadelphia, \$350. Nathan P. Potts (O), on premises. Walter Rowland (O), Lyceum and Dexter streets, Philadelphia. Brick, alterations.

Dwelling, 2151 Almond street, Philadelphia, \$800. A. Nolan (O and C), on premises. Brick, 2 stories, 10x16 feet, stone foundations, slag roof.

Dwelling, 2660 Emerland street, Philadelphia, \$725. J. W. Buehler (O), 1804 Oakdale street, Philadelphia. Wm. F. Steinbach (C), 949 East Westmoreland street, Philadelphia. Brick, alterations.

Dwelling, 1916 East Lehigh avenue, Philadelphia, \$450. Mrs. Rose Fiost (O), on premises. Wm. F. Steinbach (C), 949 East Westmoreland street, Philadelphia. Brick, alterations.

Chimney, Sixteenth and Hunting Park avenue, \$2,290. Bellevue Worsted Mills (O), on premises. W. Heinicke, Inc. (C), 21 South Twelfth street, Philadelphia. Brick chimney, 34 feet high.

Dwelling, Mermaid and Reading R. R., Philadelphia, \$5,000. Yarnall-Waring Company (O), Chestnut Hill, Philadelphia. R. C. Balinger & Co. (C), 218 North Thirteenth street, Philadelphia. Brick, 1 story, 128x40 feet, steel sash.

Dwelling, 4838 Tacony street, Philadelphia, \$2,500. Fayette R. Plumb (O), James and Tucker streets, Philadelphia. Wm. Kead (C), 4424 Penn street, Philadelphia. Brick, 2 stories, 18x31 feet.

Factory, 500 North Twelfth street, Phila-

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Hotel, 1223-25 Spruce street, Philadelphia, \$2,200. Estate Anna Guest (O), Widener Building, Philadelphia. D. A. McClelland (C), 4011 Baring street, Philadelphia. Alterations.

Warehouse, 127 North Water street, Philadelphia, \$1,450. Libby McNeil & Libby (O), on premises. Matthew Schmidt (C), 1308 N. Sixth street, Philadelphia. Brick, alterations.

Laundry, 607 North Forty-third street, Philadelphia, \$1,500. H. Gohn (O and C), 1552 N. Fifty-fifth street, Philadelphia. Brick, alterations.

Manufacturing Building, Sixth and Noble streets, Philadelphia, \$1,500. Estate Richard Smith (O), care of Fidelity Trust Co., Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Brick, alterations.

Tool Room, 423 Collin street, Philadelphia, \$1,500. Manwring & Collins (O and C), 24 Church Lane, Philadelphia. Brick, 1 story, 18x40 feet, tin roof.

Store and Dwelling, 2718 East Allegheny avenue, Philadelphia. Edward Lakanzwig (O and C), on premises. Brick, 1 story, 3x19 feet, slag roof, stone foundations.

Offices, 1434 North Effingham street, Philadelphia. L. Walter Little (O), 1527 North Twentieth street, Philadelphia. Myer H. Wilson (C), 2129 North Tenth street, Philadelphia. Brick, 1 story, stone foundations, slag roof.

Storage Building, Vandyke and Frankford avenue, Philadelphia, \$600. Philadelphia Dye and Finishing Co. (O), on premises. Edward Bender (C), 6014 Torresdale avenue, Philadelphia. Iron on iron, 16x75 feet.

Shop, 56 East Sharpnack street, Philadelphia, \$2,500. A. Rehman (O), on premises. John Di Paul (C), 80 East Sharpnack street, Philadelphia. Brick, 2 stories, 22x25 feet, stone foundation, slag roof.

Dwelling, 847 North Fifth street, Philadel-

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delphia, \$7,400. Olsen Machine Company (O), on premises. Lam Building Co. (C), 1001 Wood street, Philadelphia. Brick, alterations.

Theatre, 6338 Woodland avenue, Philadelphia, \$300. M. B. Benn (O), on premises. Smith-Hardican Co. (C), 1606 Cherry street, Philadelphia. Brick, alterations.

Store and Dwelling, 604 Poplar street, Philadelphia. A. Levi (O), on premises. J. Doude (C), 855 North Fifth street, Philadelphia. Brick, alterations.

Store and Dwelling, 123 Green street, Philadelphia. Louis Cutler (O and C), 610 North Second street, Philadelphia. Brick, alterations.

Manufacturing Building, Swanson, north of Ritner street, Philadelphia, \$25,000. Charles E. Johnson (O), 510 South Tenth street, Philadelphia. Franklin Eng. and Const. Co. (C), 408 Bulletin Building, Philadelphia. Reinforced concrete, 1 story, 60x20 feet, concrete on slag roof, concrete foundations.

Dwelling, 6621 N. Twelfth street, Philadelphia, \$1,000. G. L. Wheaton (O), on premises. Wm. J. Gruhler Co. (C), 219 West High street, Philadelphia. Alterations.

Dwelling, 151 Green Lane, Philadelphia, \$500. Mrs. Dewey (O), 182 Green Lane, Philadelphia. W. G. Lutz (C), 365 Roxboro avenue, Philadelphia. Brick, alterations.

Store and Dwelling, Fifth and Carpenter streets, Philadelphia, \$930. Dr. Love (O), 315 Pine street, Philadelphia. Louis Swerloff (C), 228 South Fifty-ninth street, Philadelphia. Brick, fire repairs.

Garage, 3132 Kensington avenue, Philadelphia, \$600. Thomas Kane (O), 2132 Kensington avenue, Philadelphia. Wm. Harriot (C), 207 West Cambria street, Philadelphia. Brick, 1 story, 15x35 feet, concrete foundations, slag roof, 1 story.

Garage, Knox and Manheim streets, Philadelphia, \$1,750. J. E. Poorman (O), 147 Manheim street, Philadelphia. Thos. McKelly (C), 4411 Germantown avenue, Philadelphia. Brick, 1 story, cement floor, slag roof, 16x28 feet.

Residence, 6400 Sherwood Road, Philadelphia, \$700. Mrs. F. D. Casanave (O), on premises. Milton W. Young (C), Overbrook, Pa. Stone, one-story addition, 15x16 feet.

Storage Building, Wayne and Logan streets, Philadelphia, \$400. Pasquarello (O), 4906 Wayne avenue, Philadelphia. John Roman, 4908 Wayne avenue, Philadelphia. Brick, alterations.

Store and Dwelling, 1700 South Twentieth street, Philadelphia, \$300. American Stores Co. (O), Fourth and Noble streets, Philadelphia. H. B. Boone (C), 665 North Fifteenth street, Philadelphia. Brick, alterations.

Offices, Belgrade and Tioga streets, Philadelphia, \$3,155. Wm. F. Gould (O), on premises. Fred Pezzillo (C), 3346 Almond street, Philadelphia. Brick, 1 story, 18x38 feet, stone foundations, slag roof.

Dwelling, 2304 West Montgomery avenue, Philadelphia, \$385. John A. Fitzpatrick (O), on premises. James McCann (C), 1704 Poplar street, Philadelphia. Brick, 1 story, slag roof, stone foundations, 15x11 feet.

Dwelling, 3815 Chestnut street, Philadelphia. Weightman Estate (O), 1524 Chestnut street, Philadelphia. James S. Talley (C), 1932 Market street, Philadelphia. Brick, interior and exterior alterations.

Store and Dwelling, 3587 Richmond street, Philadelphia, \$700. Louis Goodmayer (O), on premises. Walter J. Peters (C), 4909 Tacony street, Philadelphia. Brick, alterations.

Garage, 749 South Swanson street, Philadelphia, \$6,800. James G. Gallagher (O), on premises. M. J. Bonamy (C), 3042 West York

street, Philadelphia. Brick, 1 story, 21x148 feet, slag roof, stone foundations.

Garage, 2325 Sedgley avenue, Philadelphia, \$300. Joseph H. White (O), Twenty-fourth and Sedgley streets, Philadelphia. Brick, stone foundations, 10x24 feet, slag roof.

Dwelling, Vincent, west of Rising Sun avenue, Philadelphia, \$3,500. Michael Stevens (O and C), 910 Faushaw street, Philadelphia. Brick, 1 story, 25x35 feet, asphalt shingle roof, hot air heat.

House, 26 and 28 South Mole street, Philadelphia, \$1,500. A. S. Tourison (O and C), 7014 Boyer street, Philadelphia. Brick, alterations.

Office Building, 1713 Filbert street, Philadelphia, \$9,000. Pennsylvania R. R. Co. (O), Philadelphia. Harry R. Rust (C), 18 South Eighth street, Brick, 3rd story, 14x112 feet.

Manufacturing Building, Richmond, north of Frankford avenue, \$1,000. G. H. Barnett (O), 1078 Frankford avenue. M. Ward Casby (C), 1420 Chestnut street. Brick, alterations.

Tenement House, 1735 Naudain street, \$500. Octavia Hill Association (O and C), 613 Lombard street. Brick, alterations.

Office Building, Margaret and Bermuda sts., \$50,000. Barret Co. (O), Frankford, Philadelphia. Turner Co. (C), 1713 Sansom street. Reinforced concrete, 4 stories, 60x50 feet, slag roof.

Garage, 4721 Umbria street, Philadelphia, \$300. Eugene Sobo (O and C), on premises. Brick, 1 story, 20x12 feet, stone foundations, slag roof.

Store, 533 Market street, \$800. H. Goldberg (O), on premises. J. Garechov (C), 4116 Girard avenue. Brick, alterations.

Store, 508 South street, \$1,600. David Snyder (O), on premises. J. Garchan (C), 4116 Girard avenue. Brick, alterations.

Garage, Seventeenth and Indiana avenue, \$2,000. H. D. Dougherty Co. (O), on premises. H. J. Donnelly (C), 135 North Twenty-second street. Stone foundations, 1 story, 22x46x12 feet, brick.

College Building, Girard and Corinthian avenue, \$4,000. Board of City Trusts (O), Lafayette Building. F. L. Hoover & Sons (C), 1023 Cherry street. Interior alterations.

(Continued from Page 524.)

ation to build ships and docks and is improving its opportunity. The Scandinavian countries may be expected to hold their own. It is even conceivable that Germany may now, at some hidden spot, be replacing the tonnage which she lost through seizure and destruction during this war.

The gripping fact is that two new ship builders have been added to the international list—America and Japan.

With momentum so strong in that direction, it is hardly likely that ship building will come to a sudden stop at the end of the war. It is reasonable to suppose that ship yards which have been developed—and financed—to the point of highest efficiency will make a desperate fight to continue active. They will try to—and must succeed in part—expand the world's carrying capacity. And, those who control the ships may be relied upon to try

every expedient to keep their tonnage employed on some kind of a basis.

This—to our way of thinking—means that we are likely to have more ships than things to carry at once. This presents a problem which must be considered seriously. We will, in the reconstruction period, have to consider the vastly different position which shipping will then occupy from that which it now occupies.

That is to say, to-day there is a shortage of ships. To make the few ships go as far as possible, they are employed only in carrying the finished material. Speaking of steel, for example, these ships are carrying the finished steel instead of trying to carry the seven tons of raw material which go to make a ton of finished steel.

After the war, the problem will probably be to keep the ships employed. The means to this end, which will naturally suggest itself, will be to employ the ships to carry the seven tons of raw material rather than the one ton of finished product.

RAW MATERIALS GLORIFIED.

Thus the necessities of the world shipping situation will suggest that the pre-dominance of international trade will be in the raw materials.

This will be consonant with the needs of the world powers which will want, primarily, raw material as the basis of their own reconstruction efforts. *Thus everything points to the super-importance of the "originating industries" or the raw materials in the reconstruction period which is to follow the war.* These therefore must demand first attention at the hands of those who are to supervise the reconstruction efforts of our nation.

Besides, there is a philosophical point in support of this theory. It was the development of the raw materials of America which gave us our activity from the Civil War until the turn of the century. It will, probably, be the development of the raw material which will give the new life to Russia. The possession of raw material—or of the countries which can produce them—will be the big question at the peace table. Everything, therefore, indicates the super-importance of raw material and the need to consider that question as the pivotal point of any preparedness-for-reconstruction program.

RELATIVE VALUES.

As hinting, perhaps, at the direction which action must take ultimately, we will have to consider—early in the discussion of a proper preparedness-for-reconstruction program—the proper and established relations between the prices of raw material—including labor—and the proper value of the finished product.

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In coal, for example, it is the established rule that the labor cost is eighty per cent. of the total production cost. If it should be decided, therefore, that coal should not cost more than \$1 a ton to produce it, then the wages of labor should not be more than eighty cents a ton. And, since skilled labor takes two-thirds of this cost and unskilled labor the other third, the indicated price for each is clearly established. (These, incidentally, are mere figures and not suggestions.) Then, the cost of coal having been established, the cost of sales and administration must be added, plus the margin—if any—of profit. These percentages are all known and can be figured.

Having established a basic price for one commodity, the basis for other prices is automatically established. That is, it requires five and a half tons of coal to make a ton of steel. The price of coal and the price of other raw materials having been determined as indicated, the proper *initial and maximum* price for steel, in a *reconstruction period*, is easily figured. In fact, it becomes a simple problem in addition.

ARRIVING AT OPENING PRICES.

That is, it is not really necessary to allow prices to gravitate to normal through a distressing period of depression and the slow process of reconstruction which will take years. Instead it is easily possible, through as indicated the application of known percentages, to arrive at opening—and maximum—prices for the period of reconstruction. This can be done by a system of calculations with agreed raw material prices as the base.

These things all fall, logically and naturally, out of any analysis which first takes into account the world situation and opposes it by the clearly proved world need. Also, these things fall naturally out of the consideration of the difficulties which must confront each individual in America. If we have analyzed the situation correctly, then the call is for some kind of concerted action along these lines.

The question instantly arises, of course, what form should that action take? That is a moot subject. We do not care, at this juncture, to go extensively into that question. We will content ourselves here with the statement that we propose to analyze and discuss that subject at another and proper time.

Out of this whole discussion comes one fact of vital importance. There are serious basic questions to consider—the return of commodity prices to normal; the restoration of labor cost to normal; the re-establishment of commercial credits; and the revamping of market relations—before we can even begin to reconstruct.

This must be done carefully and quickly or the world must suffer a business relapse while normal conditions are being restored through the gravitation process. *Therefore, if we are not to suffer the inconveniences and annoyances of a readjustment by gravity, we must have a preparedness-for-reconstruction movement. That seems to be the most urgent need of the hour.*

CO-OPERATION BETWEEN BUILDING INDUSTRIES AND THE GOVERNMENT.

(Continued from Last Week.)

In this statement we realize that we have dealt only in generalities. We are prepared to discuss the situation in detail, and for that purpose, if it should meet with your approval, we would respectfully suggest the arrangement upon your part of a conference between responsible officers connected with the six administrative governmental agencies, previously referred to as exercising functions affecting construction resources, and our committee. At such a conference policies and methods in detail could be discussed looking toward the establishment of the governmental unit or board referred to. If such a board is in your wisdom desirable and is appointed the Executive Committee of the National Federation of Building Industries would be glad to act as advisors or specialists from the point of view of the industries involved, as well as a clearing house for the accumulating of information and the problems of the industry itself.

To the Government such counsel would be useful in assuring action based upon an understanding of practical conditions, and the industry would be given a greater feeling of confidence that it had been afforded a hearing.

Furthermore, our committee, through its contact with such a board, would be able to convey to the industry generally a more vivid perception of occasions for war sacrifice, as seen from the Government point of view, and communicate it to the industry in its own language and through its accustomed channels.

This communication is addressed to you, sir, because your position as general mediator between the Government and industry makes you the natural leader in any step toward establishment of a Government point of contact with building construction.

Awaiting your convenience, we are, with high respect,

Yours truly,

NATIONAL FEDERATION OF BUILDING INDUSTRIES,

By its Executive Board:

ERNEST T. TRIGG, Philadelphia, Pa., Pres.,

Vice-President John Lucas & Co., Inc.

WALTER S. DICKEY, Kansas City, Mo.,

Vice-Pres. Clay Products Association.

A. M. MADDOCK, Trenton, N. J., Treasurer,

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B. F. AFFLECK, Chicago, Ill., President Universal Portland Cement Co.

JOHN L. KAUL, Birmingham, Ala., National Lumber Manufacturers' Association.

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COLONEL J. R. WIGGINS, Philadelphia, Pa.,

President National Association of Builders' Exchanges.

CHAS. W. GOMPERTZ, San Francisco, Cal.,

President Building Industries Association of San Francisco.

JOHN A. KLING, Cleveland, Ohio, former

President National Builders' Supply Association.

—“American Contractor.”

CONSTRUCTION WORK ACCIDENTS

By Sidney J. Williams, Manager Accident Prevention Division, National Safety Council.

While employers, large and small, in almost every other branch of industry, have been reducing their accidents from 50 to 85 per cent., the great construction industry has, with few exceptions, done little or nothing in this important feature of modern efficient production. Why is this? Is it because, as many contractors have told me, “conditions are different in the building trades?” A switching crew is, or was, quite as reckless as a gang of steel erectors; common labor is quite as ignorant and nearly as shifting in the steel mills as on construction work; yet the steel mills and the railroads have made records second to none in modern scientific accident prevention.

Whatever may be the cause, consistent, organized accident prevention in construction work is almost unknown, and accident fre-

quency has been correspondingly high. In Wisconsin the building trades include only 5 per cent. of the workers in all industries, yet they contribute from 15 to 20 per cent. of fatal and serious injuries. In New York State the Industrial Commission tells us that more workers are killed on construction work than in all the factories, although factory workers are four times as numerous. In Pennsylvania, in the building trades alone (not including other construction work), during the first six months of 1918, 111 persons were killed and 1,600 others were injured seriously enough to receive compensation.

This high accident record is, of course, reflected in insurance rates. The rates are high for all construction work, and for some branches are higher, I believe, than in any other industry—reaching 10, 15 or even 20

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per cent. of the payroll.

While I have emphasized insurance expenditures, these are by no means the only cost of accidents. As in other industries, the temporary stoppage of work, the loss of an experienced man and the cost of breaking in a green man (if, indeed, a green man can be obtained), and the frequent loss or damage of materials, amount to much more than the actual cost of compensation.

What are the causes of construction accidents? The Wisconsin Industrial Commission has analyzed 2,000 such accidents for which compensation was paid last year. More than one-quarter of these accidents, and nearly one-half of all fatal accidents, were falls from scaffolds, ladders, buildings, etc.

Almost any one can build a safe scaffold; the danger lies in the temptation to save time and material on scaffolds for temporary use. If the scaffold breaks, the expected saving becomes a heavy loss. Except for the very lightest work, the supports for two-inch scaffold planks should not be more than eight feet apart. A two-inch plank on a twelve or fourteen-foot span will ordinarily carry one man with perfect safety, but if two or three men come together at the center of the span the plank is likely to break. The scaffold must be well braced; one often sees quite a high scaffold without diagonal bracing; depending for stability on one or two boards fastened to an adjoining building. If one of these boards breaks, or is accidentally removed by a careless workman, the scaffold may topple over like a house of cards. The scaffold must also be properly supported at the bottom and not propped up on a pile of loose blocking or a fragile tile.

The old-time carpenter or bricklayer would have scoffed at the idea of a railing on his scaffold—and plenty of them scoff at it to-day; yet we know from bitter experience how easy it is for even the best and most experienced workman to make a misstep, especially if the scaffold is slippery from snow or rain, or if he stumbles over a piece of brick or wood. A bricklayer can work more efficiently and rapidly on a well-railed scaffold because he does not have to keep always in mind the danger of getting too near the edge. With the railing should go a to-board, to prevent objects from falling on the heads of workmen below.

On many scaffolds of moderate height the runway is an important feature. This is often a single plank, so inadequately supported that if it does not break it at least vibrates to such an extent that a secure footing is impossible. I believe I have seen more time wasted by workmen struggling up improperly built runways than in any other of the many inefficient methods which one notes on some construction jobs. A substantial, smooth, wide and easy runway will save a great deal of time and prevent delays as well as accidents.

Hanging scaffolds, used for painting and similar work, require careful attention. The scaffold itself should have a railing at the back and at both ends; the ropes require frequent inspection and occasional testing if desirable.

Falls from Ladders.

Falls from ladders are next in number and seriousness to falls from scaffolds. These are often caused by the breaking of some part of the ladder and can easily be prevented by replacing the part as soon as it becomes badly worn, instead of waiting for it to break.

For passing from floor to floor, on a job of any magnitude, double ladders should be provided, one side to be used for men going up and one side by men coming down. On large jobs, many contractors find it profitable to provide temporary stairways in place of ladders.

Many serious accidents have occurred by persons falling through openings in floors. It is obvious that such openings should be nailed in or covered over; yet this necessary precaution is often neglected.

According to the Wisconsin experience, falling objects are next in importance to falls of persons as an accident hazard. The proper construction of scaffolds, runways, and railings around floor openings will prevent many accidents due to falling material. Where one man or a gang of men is working above another it is very often necessary to make special provision for catching falling tools or materials. This is especially essential in the case of existing buildings, where the men below are factory employees and not in the habit of guarding themselves against falling materials.

In this group fall the numerous accidents caused by the cave-in of excavations. It seems to be the habit of ditch-diggers to take long chances; most ditches that we see are considerably underbraced, from the standpoint of efficiency as well as of safety. It is a good deal easier to brace a ditch than to dig out a cave-in.

Other accidents are caused by the very dangerous practice of workmen riding up and down on elevators or derricks. This should be prohibited—let us note in passing that the foreman or the "big boss" must not himself violate the rule if he expects his workmen to obey it.

The nail hazard is always an important one, although, according to the Wisconsin experience, it is not responsible for so large a proportion of construction accidents as many contractors believe. Stepping on and striking against nails and other sharp shop objects is entirely a matter of keeping the shop in a clean and orderly condition, which, needless to say, is a great aid to efficient work as well as to safety.

To take care of nail punctures and other minor injuries some sort of first aid equipment is necessary. At the least this should

include a bottle of arnica, hydrogen of peroxide or other antiseptic, some rolls of gauze bandage, salve for burns, etc., all in a clean box; at the most, we find on some progressive jobs a small field hospital in charge of a trained nurse, similar to the hospital room in an up-to-date factory. An emergency room of this sort, on a large construction job in Chicago, brought injured men back to work sooner, reduced the number of compensation cases, and raised the morale of the workmen in general. Out of a force of about a thousand men from 40 to 100 cases were treated daily, ranging from a sliver in the hand to fractures or other serious injuries.

Injury to the eyes or other parts of the body from flying nails, particles of concrete, stone, etc., are sufficiently numerous to deserve attention. A workman chipping stone, concrete, or steel on a construction job needs to wear goggles just as much as a workman chipping castings in a foundry. Where much chipping is to be done in one place a shield should be erected to protect other workmen or passers-by.

Tearing Down Old Buildings.

In tearing down old buildings most of the hazards already mentioned are met with—many of them in an even more exaggerated form. Quite a little time may be saved in this work by taking a chance, and as a result chances are often taken; the insurance rate sometimes runs as high as 20 per cent. Equal care is necessary when excavating alongside a building, to prevent the walls of the building from cracking or settling.

Mechanical equipment is only a part of the story. No matter how good a scaffold or ladder may be originally it soon goes to pieces unless it is carefully watched. Other large accident groups which I have not even mentioned—handling material, which was responsible for over 20 per cent. of the accidents in Wisconsin, hand tools, etc.—have practically no connection with mechanical equipment. Safety in construction work, even more than in the factory, can be secured only by constant vigilance on the part of superintendents and foremen and by educating men to be careful.

The National Safety Council is planning a special program on construction as a part of the Annual Safety Congress at St. Louis in September, after which a permanent Construction Section will be formed. When the superintendents and safety men of the construction companies, and the construction superintendents of large manufacturing plants doing a good deal of their own building work, get together for the interchange of useful information, and when they can secure every week, for use on their bulletin boards, not only the council's general bulletins, but also special bulletins on the hazards of their particular work, surely we may look for the same rapid progress in this field that has been made in other industries.—"American Contractor."

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1792

1918

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PHILADELPHIA



126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance
Tornado
Sprinkler
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Automobile
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FIREPROOFING

FIRE CLAY PRODUCTS

and

FIRE-PROOF STEEL PRODUCTS

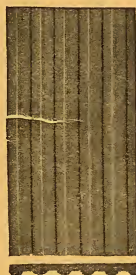
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Hollow Tile Fireproofing	Panic-Proof and Fire-Proof
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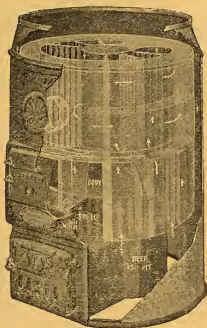
Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 39
September 25, 1918

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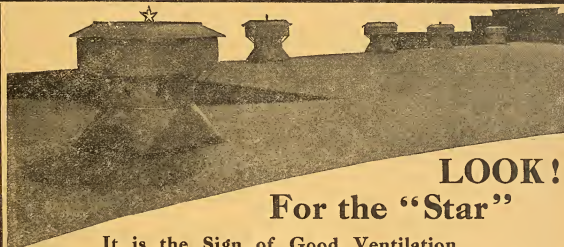
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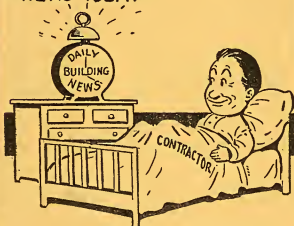
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The News that
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should be used wherever a sanitary floor is desired. Practically noiseless, it is the ideal floor for schools, public buildings, railway stations, stores, kitchens, etc.

Damp, Fire and Vermin Proof

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1433 Brown St., Philadelphia, Pa.

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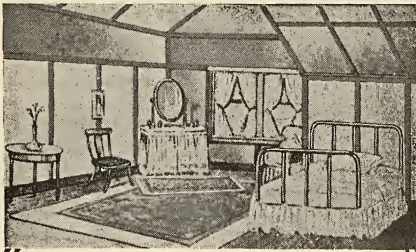
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Be sure of the finish of your well-planned job. Use Alba Flint Enamel. Better results with less cost. For inside or outside work it is durable and has a brilliant gloss which does not darken.

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Manufacturers of Colors, Paints and Varnishes since 1863

136-140 N. 4th St., PHILADELPHIA

(153)



HISTORY records that all great wars have been followed soon by periods of intense reconstruction. That the present war surpasses all others in magnitude and destructiveness only means that its sequel of reconstruction will also surpass all others in magnitude.

* * * * *

With the major portion of the world's cash in American hands, can there be any doubt that in this country construction of railroads, homes, factories, and utilities and luxuries of every kind will leap forward at an unprecedented pace?

* * * * *

The demand for everything of use or beauty is bound to be tremendous. * * * * *

The war has taught us that preparedness is really the longest word in the dictionary and also the strongest. We cannot start preparing for big business on the day peace is declared any better than we started preparing for war on the day we declared war. * * * * *

Most emphatically I believe that now is not the time to stop advertising. On the contrary, it is the time to start more and better advertising than we have ever done before.

* * * * *

Why should we hesitate to show our faith in the future of America by building for that future?"

—From an address by MR. GEORGE FRANK LORD,

Director of Advertising, E. I. Du PONT de NEMOURS & CO.

Building interests will dominate this reconstruction period.

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Our Analytical Advertising Counsel and Sales Promotion Service will improve both your plan and copy, thus insuring maximum profits. Submit your literature for preliminary analysis and quotation—no obligation.

Ross-Gould
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WHY IS WOODOLEUM FLOORING THE BEST

Because the Woodoleum Manufacturing Company is the pioneer in this line of floor covering.

Because we use only the best materials, and *because* our guarantee is absolute and unqualified.

There is but one WOODOLEUM—accept no imitation

WOODOLEUM MFG. CO.

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American Metal Weather Strips

For Every Design of
DOOR OR WINDOW

W. J. BAKER CO.'S

All Metal Frame Screens and Wood Frame Screens
For every kind of building where quality is desired

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BAIRD-OSTERHOUT COMPANY

Electrical Contracting in all its Branches

1620 Chancellor Street, Philadelphia

BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 39

PHILADELPHIA
September 25, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

PUBLISHED BY

Building News Publishing Company, Inc.

PERRY BUILDING, PHILADELPHIA

Washington Office, McLachlen Bank Bldg.

Louis S. DeLone.....President

H. A. Lang.....Vice-President

Joseph M. DeLone.....Secretary and Treasurer

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Second Class Matter



As The Editor Sees It



EVERY American today realizes that our most important business is winning the war, we are confident of victory, but our aim is to win as quickly as possible.

Along with our belief in America's ability to win the present conflict, goes our faith in a great future for America after the war. Then will come the reconstruction, for which America must supply the materials not only for herself but for the rest of the world.

We all know that this is a day of planning and preparation, that the demand for homes existing everywhere must be satisfied; that the many projects, which have been suspended during the war, will be immediately put into execution at the close of the war. Architects' offices are full of plans for buildings that must be built as soon as the present conflict ends.

Wide-awake business men want to share in the great reconstruction business. Have you thought out the matter carefully? What are you doing to identify yourself and your products with the plans now under way, or, in the minds of prospective builders, what are you doing to promote the good will of your concern and your products? Have you planned to conserve by discontinuing your advertising?

Think carefully, Mr. Business Man. It is too easy, in these busy days, to forget. The man or the company that advertises—keeps in the public mind now, is the one to whom the public will turn, in its post-war activities.

You may say I can't afford to advertise now. Can you afford not to advertise?

* * *

SENATOR CALDER, in again upholding the Building industry, submitted this month a resolution to the United States Senate which was agreed to as follows:

Resolved, That the war industries board be directed to transmit to the Senate all orders promulgated by that board relative to the construction and alteration of public or private buildings and to advise the Senate under what authority of law said orders were issued.

In introducing the resolution, Senator Calder said: "I introduce this resolution because articles appearing in the newspapers within the last day or two indicate that the war industries board has promulgated orders which in effect will completely destroy the building industry of the country. The building-material industry of the country has an investment of \$4,000,000,000 in their business, and the new buildings constructed in the nation in the last pre-war year—1916—totalled \$1,800,000,000.

As I understand these orders, they prevent the construction of a barn, a silo, or even a private dwelling house or of any building of a private character without the permission of the Federal Government. If it be necessary in order to win the war to destroy this great wealth and tax producing industry, of which it seems to me there can be few more essential, we ought to know it and

the reasons for it; but if this great business can be saved, at least in part, some way should be found to do so.

The regulation of all industries to meet war requirements is a matter of necessity. However, as the senator well says, there should be careful consideration of the matter before a \$2,000,000,000 a year business industry is destroyed.

* * *

IN these days of accomplishment we are surprised at nothing. The only feeling which will be aroused by the advent of a "Folding Bungalow" is that of envy, for in these days of servant problems, a house of such ultra-modern conveniences could crack the hardest nut in servant difficulties. The Bungalow in question is the invention of Mr. Adam Int-Hout of Chicago, designed says the *Architectural Record* and built by himself, and in which he and his family live with as much comfort as the average dweller in a three-bathroom apartment.

Mr. Int-Hout touches a button or a lever, and, presto! the partitions of his cabinets, bookcases, dining room table and other articles of furniture appear or disappear; in this folding bungalow probably more of the essentials of fine living are compressed into a smaller space than in any similar structure ever built.

The bungalow is twenty-six feet square; has a living porch eight by ten feet in front, and a wide entrance porch and porch seat. It stands in the middle of a fifty-foot lot and is shaded by two immense arching elm trees. The house

**DRAWING
MATERIALS**

CHARLES H. ROBBINS, JR.
125 S. 11th Street, Philadelphia
BELL PHONE, WALNUT 1086 KEYSTONE PHONE, MAIN 497

**BLUE
PRINTS**

is divided into living room, kitchen, bathroom, downstairs bedroom and a furnace closet. There is no sign of a dining room; nevertheless such a room exists and you are likely to find yourself in it when you least expect it.

The easiest way to understand it is to imagine that you have been invited to dinner at the Int-Houts. After you have been welcomed, the hostess, leaving you in the living room, excuses herself to go into the kitchen—for no maids upset the scheme of harmonious living that this family is working out.

Perhaps the first thing that catches your attention is the stairway next to the entrance door, and you notice the clever way in which the balustrade forms a set of book shelves running clear down to the floor. Next to this is the closet for out-door wraps, then the opening of the small hall leading to the bedroom where you took your things off, and next there is a grille which extends from floor to ceiling just in the middle of the long wall space that forms the back part of the living room.

This grille seems to serve no particular purpose, and while you are wondering what it is for, your eye travels along to some water-colors hanging on the next six feet of wall space. This partition and a swinging door, which leads to the kitchen, seem to complete all that there is to be seen along the back wall. But just then Mrs. Int-Hout appears and hooks the kitchen door back and you immediately begin to rub your eyes. Heavens! is the wall really moving? Your hostess stands there calmly with her hand on the door casement, seeming barely to touch it, and yet the whole piece of wall is turning round into the kitchen. You know this because the pictures are going into the kitchen as fast as they can, while with equal celerity a small hanging china cabinet comes into view on what was the kitchen side of the partition. Nor is this all, for along with the china cabinet comes a dining room table, in all the splendor of china and glass and snowy napery and tempting viands. The table appears to be fast to the wall until Mrs. Int-Hout gives it a touch with her hand, whereupon it takes its position exactly in the centre of that half of the living room.

A half-mile at least of needless walking has been avoided by setting the table in the kitchen where everything is close at hand, and then moving it by a touch right into the presence of the hungry and expectant guest. When the meal is near its end and dessert is mentioned, you naturally expect the hostess to go into the kitchen after it. Instead she simply reaches out toward the china cabinet, and there on an open shelf beneath it repose the last course of the meal.

This shelf also serves to receive the plates and other dishes when they are removed.

But perhaps the best part of it all is that one can sit at the table and talk as long as one likes without worrying about getting the table cleared off quickly for fear it will look untidy. Or if the door bell rings and other visitors appear, the table can be sent off simply by pushing it over to the partition and starting it. The wall does the rest, and the table is cleared with all the dishes right beside the sink, ready to be washed.

The most important part of the home from the man's point of view is the furnace. It is in a closet in the centre of the room, and the front wall of this is formed by the grille spoken of.

A school furnace, protected by a drum, stands in the closet, which is directly in the centre of the house. Cold air holes have been drilled along the bottom of the drum to the height of fourteen inches. As the furnace must send heat in every direction, the side partitions of the closet have been cut off above and below, fourteen inches from the floor and the same distance from the ceiling; the front partition is an open grille clear to the floor.

By this ingenious arrangement an absolute suction for drawing cold air in is effected. Its success as the basis of a heating and ventilating scheme is shown by the fact that the entire house was kept warm all winter on less than five tons of coal.

One of the worst features of caring for the furnace, the carrying of coal, has been eliminated by another clever arrangement. There is back of the furnace a two-foot space which runs between the kitchen and the bathroom. Here are the gas meter, the water meter, a medicine chest for the bathroom, and a chute which is built to answer the purpose of a stationary coal closet. It holds two tons, and has the outside window just high enough so that the coal may be thrown into it directly from the delivery wagon. The slope adjusts the gravity so exactly that the coal always falls to the door of the chute, which is directly opposite the door of the furnace. All you have to do is to turn around and take out a shovelful as you would from a coal-box.

The kitchen has a stationary laundry tub of porcelain, the top of which forms the drip-board of the sink. In the back wall is a kitchen cabinet, with drawers and swinging doors in the lower part and shelves with glass doors in the upper part. As this cabinet is built into the back wall, it would curtail the light ordinarily. This is avoided by glassing both the front and the back, an arrangement which not only lets the light through, but also cuts down the heat, as

it is only necessary to open one of the small outside panes to make the cabinet into a cooler.

There is an upper room, fifteen and a half feet square, with north and south glass doors opening on sleeping porches, thus making it cool and totally unlike the ordinary attic room.

The folding bungalow cost about \$2000 to build, and it was completed in six weeks, the outside wall being of stucco set on a foundation of concrete.

ENGLISH BUILDING PRICES AND ECONOMY IN FUTURE WORK.

There is no question at all that the conditions under which building will have to be carried on after the war will enforce the closest attention by architects and builders to the substitution of new materials and methods of construction for those hitherto in vogue. A prominent surveyor recently expressed the opinion that the present level of building prices was likely to obtain for at least ten years after the war, so on any such assumption economy alone would dictate every possible effort in this direction. For ourselves, we incline to an alternative view, also given publicly, that when the war pressure has been relieved there will be an immediate tendency for prices to ease off from their present abnormal height, and within a reasonable time fix themselves at 35 per cent. to 40 per cent. above pre-war figures, with the prospect of remaining there. A considerable factor in the present situation is the uncertainty of the position from day to day with regard to labor and materials, and until this can be somewhat stabilized, as it must be fairly soon after the cessation of hostilities, builders must be expected to cover themselves very amply or face the prospect of personal catastrophe.

Whatever the present position may be, however, a higher level of prices for the future is certain, and it is not too early to investigate possible ways of mitigating the difficulties arising therefrom.

This was recognized to some extent by the promoters of the recent official Cottage Competition in asking competitors for suggestions to this end. In effect, the response was feeble, competitors in general being content to work much along the old lines, beyond proposing the use of concrete for the upper floors and in some cases for constructing the staircases.

In the case of large building schemes, concrete construction had been gradually pushing itself into the foreground even before the war, and it seems likely now to establish itself as the universal material for the framework of future buildings of any considerable size. The avoidance of timber, except for temporary sheeting and strutting, and also the use of steel in light and easily handled rods and bars instead of heavy sections, are the principal features upon which this opinion is based.

Of course, it is very difficult in the midst

(Continued on Page 543.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Gill Glass Warehouse, Philadelphia General Supply Ordnance Depot, Philadelphia. Architect, private plans. Owners, Ordnance Depot Supply Division, care of Major L. B. Schleber, Middle City Building, Philadelphia. Wooden Ramp, 104x10 feet; Freight Platform Extension, 158x9 feet to 15 feet, bumpers, new doorways, plank floors, electric work. Owners taking bids. Wills-Ludwick Co., 34 South Seventeenth street, are figuring.

Experimental Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal, Philadelphia. Brick, concrete and steel. Plans in progress. Owners will be ready for bids in about one month.

Warehouse, Tacakawanna and Ruan streets, Philadelphia. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Roberts Filter Manufacturing Co., on premises. Brick and concrete, mill construction, 2 stories, 65x100 feet, slag roof, concrete foundations, steam heating, electric lighting, cement floors, fire doors (plumbing, heating and electric work reserved). Architects taking bids, due September 25th. Smith-Hardican Co., 1606 Cherry street; Barclay White & Co., 1713 Sansom street; P. Haihach Cont. Co., Twenty-sixth and Thompson streets; H. E. Grau Co., 1707 Sansom street, are figuring.

Gun Plant Power House Sub-Station, No. 3, and alts. to Pattern Storehouse, Nicetown, Philadelphia. Architect, private plans. Owners, U. S. Midvale Gun Plant Co., Widener Building, Philadelphia. Brick work, concrete work, 42x46 feet, slag roof, rolled steel sash, iron stairs, alterations to third bay of pattern stores and addition of 2 1500 kwt. rotary transformers. Owners taking bids, due as soon as possible. Barclay White Co., 1713 Sansom street; George C. Dietrich, South Penn Square Building; Harry Broeklehurst, 512 West Norris street, are figuring.

Restaurant Building, Nicetown, Philadelphia. Architect, private plans. Owners, U. S. Midvale Gun Plant Co., Widener Building, Philadelphia. Brick, 1 story, 84½x60 feet and 13x34½ feet, slag roof, concrete foundations, concrete and granolithic floors, rolled steel sash (heating, electric work, kitchen fixtures and cooking implements, refrigerator and ice machine reserved by owners). Owners have received bids.

Magazine Buildings (8) and Barrier Walls, Frankford Arsenal. Architect, private plans. Owners, Frankford Arsenal, care of Major Huckendorn, Frankford Arsenal. Reinforced concrete, gypsum blocks. Buildings Nos. 1, 2, 3 and 4, 24x45½ feet; Nos. 5, 6 and 7, 30x49 feet 4 inches, and No. 8, 30x48 feet. Barrett roof, maple floors, electric lighting, hollow tile, metal lath, steel plate, ornamental iron work. Owners taking bids, due September 30th. Wm. R. Dougherty, 1610 Sansom street; P. W. Mark Cont. Co., Finance Building; John M. Yardley, 1716 Sansom street; Wm. Steele & Sons Co., Sixteenth and Parkway; Melody & Keating, 1322 Race street; H.

H. Wehmeyer, 509 West Cumberland street; W. W. Anstine & Co., 1218 Filbert street; Ketcham & McQuade, 1029 Brown street; Wark Co., 1737 Filbert street; Hogg Construction Co., 1634 Sansom street, are figuring.

Boiler House (add.), Tacony, Philadelphia. Architect, private plans. Owners, Henry Diss-ton's Sons & Co., on premises. Brick and stone, 1 story and tower, 47x15 feet and 24x75 feet, slag roof, cement floors. Owners taking bids. H. H. Wehmeyer, 509 West Cumberland street, is figuring.

Storage Building (alts.), 1211-23 Buttonwood street, \$6,000. Architect, private plans. Owners, Tinius Olsen Testing Machine Co., 500 North Twelfth street. Brick, 3 stories, steel beams, cement floors, hollow metal skylights, rolling steel shutters, general alterations. Lam Building Co., 1001 Wood street, is taking sub-bids.

Stores and Apartments, 2754-56 Kensington avenue. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. Brick, stone foundations, 2 stories and basement, 55x62 feet, irregular, slag roof, flush bulks, metal ceiling, marble work, tapestry brick, hardwood floors, electric lighting. Plans completed. Ready for bids.

Factory (alts. and add.), North Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner's name withheld. General alterations and additions. Plans in progress. Too early for details.

Emergency Hospital Buildings, Spec. 3297, Gray's Ferry Road, Philadelphia. Architect, private plans. Owners, U. S. Government, care

of C. W. Parks, Chief, 613 G street, N. W., Washington, D. C. Hospital Corps Barracks (2), 2 stories, 118x164 feet; Nurses' Quarters, 3 stories and basement, 192x65 feet; Subsistence Building, 1 story, 142x45 feet and 34x79 feet; Boiler House and Laundry, 2 stories and mezzanine floor, 87x48 feet; Wards (8), 2 stories, 113x190 feet; Observation Ward, 2 stories, 39x190 feet; Officers' Ward Building, 2 stories, 107x34 feet; Shed, 1 story, 80x30 feet, frame, hollow tile, brick, concrete foundation, ready and slag roof, composition and cement floors, metal lath, ventilators, fireproof and tin-clad doors, kalamein doors, electric wiring, steam heating. Lowest bidder, Melody & Keating, 1322 Race street, Philadelphia, \$323,349.

Water Supply, Sewage and Drainage System, Spec. 3396, Emergency Hospital, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Cast iron pipe and fittings, galvanized pipe and fittings, terra cotta pipe and fittings, sump house and manholes, reinforced concrete work, brick work, waterproofing, ready roofing. Owners taking bids, due September 30th at 11 A. M. F. J. Boas, 201 North Broad street, and M. H. McCloskey, Jr., 1620 Thompson street, are figuring.

Case Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major H. Huckendorn, Frankford Arsenal. Brick, steel and concrete. Plans about completed. Owners will be ready for bids in one week.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Store and Office Building, 1726-28 Ludlow street, Philadelphia, \$10,000. Architect, private plans. Owners, Frank P. Mellon Estate, Middle City Building, Philadelphia. Brick, 1 story, 73x36 feet, slag roof, cement floor, pine floor, electric lighting, metal lath, stone foundations (heating reserved), will build additional stories at later date. Contract awarded to George C. Dougherty, 1725 Ludlow st., Philadelphia.

Garage, Woodland avenue, west of Fifty-seventh street, Philadelphia, \$14,000. Architect, H. B. Weldon, 1606 Cherry street, Philadelphia. Owners, J. Gibson Melvaine Co., Fifty-eighth and Woodland avenue, Philadelphia. Brick, 1 story, 60x120 feet, slag roof, concrete floors. Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Office (alts.), 110 Tasker street, Philadel-

phia. Architect, private plans. Owners, Atmore & Son, on premises. Electrical work, 2 window openings, painting. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Elevator Shaft, 1720 Lombard street, Philadelphia, \$2,500. Architect, J. Ethan Fieldstein, Penfield Building, Philadelphia. Owners, Polyclinic Hospital, Eighteenth and Lombard sts., Philadelphia. Brick, elevator shaft and elevator, 4 stories, 6x8x70 feet. Contract awarded to Albert Zelfelder, 151 South Broad street, Philadelphia.

Sun Parlor and alts., Fifth and Wilder streets, Philadelphia, \$8,000. Architect, private plans. Owners, Mount Sinai Hospital, on premises. Stone foundations, brick, 16x21 feet, wood floors, interior alterations. Contract awarded to Wm. Linker Co., 831 Cherry street, Philadelphia.

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Store and Dwelling, 460 North Eighth street, Philadelphia, \$5,000. Architect, private plans. Owner, Louis Fein, 527 North Marshall street, Philadelphia. New bath room, brick work, partitions, tile work, plumbing and fixtures. Contract awarded to M. Yellin, 712 North Franklin street, Philadelphia.

Factory, 1882 East Venango street, Philadelphia, \$10,000. Architect, private plans. Owners, Ajax Wool Processing Co., 1822 East Venango street. Brick, 1 story, 40x100 feet, slag roof, cement floors, brick paving, concrete foundations (heating and lighting reserved). Contract awarded to E. R. Hall & Co., 34 South Seventeenth street, Philadelphia.

New Woodworking Plant "F." Forty-ninth and Botanic avenue, Philadelphia. Architect, Conrad F. Neff, Sixteenth and Sansom streets, Philadelphia. Owners, George W. Smith & Co., Inc., on premises. Brick, reinforced concrete, cut stone, 2 stories, 163x85 feet, slate and J-M roof, oak and cement floors, hollow tile, metal lath, roof ventilators, waterproofing, electric lighting, tile and marble work, rolled steel sash, hollow metal skylights, sprinkler system, ornamental iron work, screens, ice machine, weather strips. Contract awarded to John N. Gill & Co., Otis Building, Philadelphia.

Manufacturing and Storage Building, Sixty-second and Woodland avenue, \$75,000. Architect, private plans. Owners, J. G. Brill Co., on

premises. Concrete and steel, 2 stories, 86x140 feet, slag roof, concrete foundations, electric lighting. Contract awarded to H. E. Baton, 1713 Sansom street, Philadelphia.

Workmen's Houses (600), Seventy-second and Elmwood avenue, Philadelphia. Architect, private plans. Owners, Emergency Fleet Corp., 136 South Sixteenth street, Philadelphia. Brick, 2 stories, 16x30 feet, slag roof, cement and pine floors, hot air and steam heating, electric lighting, dampproofing, ornamental iron work. Contract awarded to Henry P. Schneider, 3713 Old York Road.

Carpenter Shop, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major H. Huckendorn, Frankford Arsenal. Brick, reinforced concrete and steel, 2 stories, 244x58½ feet, slate, tin and slag roof, cement, maple and wood block floors, hollow tile, metal lath, 1 electric elevator, safety treads, roof ventilators, waterproofing, wire work, iron ladders, rolled steel sash and skylights, fire, steel and kalamene doors. Contract awarded to W. W. Anstine & Co., 1218 Filbert street.

Sand House, Reed street freight yard, Philadelphia. Architect, private plans. Owners, Pennsylvania R. R. Co., care of D. J. Cleave, Superintendent, 3200 Powelton avenue. Brick, 2 stories, 11x32 feet, stucco, metal lath. Contract awarded to Monaghan & Losse, Inc., 3016 Chestnut street.

street; Hoog Const. Co., 1634 Sansom street, Philadelphia, and A. Machin, 516 West Twenty-first street; Price & Johnson, and R. H. Scroggins & Son, all of Chester, Pa., are figuring.

Piggery, Spring City, Chester County, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institution for Feeble Minded of Eastern Pennsylvania, Spring City, Pa. Concrete, brick and hollow tile, 1½ stories, 309x30 feet, asbestos shingle roof, concrete foundations, cement and wood block floors, hollow tile, roof ventilators, waterproofing and dampproofing, iron work. Architect taking bids, due October 2nd at 10.30 A. M. F. W. Mark Cont. Co., Finance Building, Philadelphia, and Frank H. Kaiser Co., Pottstown, Pa.; Wm. H. Wiand, Pottstown, Pa., are figuring.

Grading and Masonry for one Track, between Sinking Spring and Wernersville, Pa. Engineer, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Owners taking bids. Irwin & Leighton, 126 North Twelfth street, are figuring.

Manufacturing Building, Forty Fort, Luzerne County, Pa. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, International Fabricating Corp., 99 John street, New York City. Brick, 2 stories, 51x160 feet, composition roof, steel sash. Plans in progress.

Machine Shop, Forty Fort, Luzerne County, Pa. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, International Fabricating Corp., 99 John st., New York City. Brick, 1 story, 80x160 feet, composition roof, concrete foundations, rolled steel sash and skylights. Architects taking sub-bids.

Residences (1,200), Eddystone, Pa. Architects, Rankin, Kellog & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, N. W., Washington, D. C. Brick, 2 stories. Plans in progress.

Residences (400), Ridley Park, Pa. Architect, Edgar V. Seeler, 101 South Juniper st., Philadelphia. Owners, U. S. Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, N. W., Washington, D. C. Brick, 2 stories. Plans in progress.

Coaling Station and Pits, Sacon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. R. Co.,

PENNSYLVANIA Construction News

Newspaper Building (alts.), Norristown, Pa. Architect, Paul A. Davis, 3rd, 1713 Sansom street, Philadelphia. Owners, Times Publishing Co., Norristown, Pa. Mason, brick and cut stone work, tin roof, yellow pine and oak floors, steam heating, electric lighting, tile and marble work (lighting fixtures reserved). Owners, care of Joseph McGinley, 2 W. Main street, Norristown, Pa., taking bids, due October 2nd at 10 A. M. Lam Building Co., 1001 Wood street; Wills-Ludwick Co., 10 South Seventeenth street; H. E. Grau Co., 1707 Sansom street, Philadelphia; and Frank R. Heavner, Norristown, Pa., are figuring.

Garage, Delaware and Partridge avenue, Ridley Park, Pa. Architects, Seeburger & Rabenold, Pennsylvania Building, Philadel-

phia. Owner, T. P. Ward, Ridley Park, Pa. Stone, 1 story, 20x25 feet, slate roof, cement floor, hot water heating, electric lighting. Owner taking bids, due as soon as possible. E. R. Hall, 34 South Seventeenth street, Philadelphia, is figuring.

Store and Apartments, West Third street, Chester, Pa. Architect, E. Allen Wilson 1208 Chestnut street, Philadelphia. Owner, Moses Levy, 15 West Third street, Chester, Pa. Brick, 2 stories, stone foundations, 20x100 feet, slag and tin roof, hardwood and parquetry floors, hot water heating, electric lighting, tile and marble work, steel sash, hollow metal skylights, ventilators, stucco, millwork. Architect taking bids, due October 2nd at noon. A. Sonnenfeld, 287 South Sixty-third

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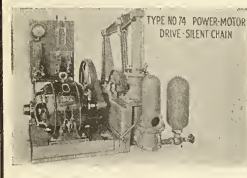
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Reading Terminal, Philadelphia. Reinforced concrete and steel. Owners taking bids, due September 25th. Irwin & Leighton, 126 North

Twelfth street, and Roydhouse-Arey Co., 112 North Broad street, Philadelphia, are figuring.

NEW JERSEY

Construction News

Marine Barracks, Lake Denmark, N. J., \$60,000, Spec. 3217. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Extension to Marine Barracks. Owners taking bids, due September 30th.

Power House, Spec. 3406, Cape May, N. J., \$67,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick and reinforced concrete, 1 story, 98 feet 9 inches x 45 feet 3 inches, concrete and pile foundations, concrete and built up roof, concrete, brick and mastic floors, hollow tile, electric lighting, steel doors, steel stack. Owners taking bids, due September 30th at 11 A. M. Crump & Co., Duckula Building; W. W. Anstine & Co., 1218 Filbert street; Lam Building Co., 1001 Wood street; Hogg Construction Co., 1634 Sansom street, are figuring.

Warehouse, State street and River avenue, Camden, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, B. F. Boyer Co., on premises. Brick and concrete, 1 story, 72x102 feet, concrete foundations, slag roof, cement floors, rolled steel sash. Contract awarded to F. B. Davis, 240 North Sixteenth street, Philadelphia.

Seaplane Storage Building, Spec. 3381, Gloucester, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story, 110x200 feet, ready roofing, concrete foundations, cement floor, roof ventilators.

Contract awarded to George F. Pawling & Co., 1422 South Penn Square, Philadelphia, \$17,980, time 35 days.

Hospital, Municipal Colony, Trenton, N. J. Architect, Wm. Kleinmann, First National Bank Building, Trenton, N. J. Owners, City of Trenton, care of Mayor F. W. Donnelly, City Hall, Trenton. Brick, 1 story, 40x80 feet, slate roof, stone foundations, vacuum heating, electric lighting, tile and marble work, hollow tile, concrete floors. Plans in progress.

Marine Barracks, U. S. Radio Station, Spec. 3404, Tuckerton, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, 613 G street, N. W., Washington, D. C. Frame and concrete, 1 story, 35x134 feet, 2 wings, 35x35 feet each, and one wing 28x32 feet, ready roof, concrete and yellow pine floors, electric lighting, roof ventilators, waterproofing. Lowest bidder, Sherman S. Sharp, Cape May, N. J., \$26,500.

Water Supply and Sewer System, Naval Base, Cape May, N. J., Spec. 3386. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 613 G street, N. W., Washington, D. C. Hot water circulating and steam systems, electrical distribution system, piping, etc., electric wiring. Lowest bidder, Adams Britz & Co., 1761 Park avenue, New York City, \$142,800.

Garage, 47 North Clinton street, Trenton, N. J., \$2,500. Architect, private plans. Owners, Carpenters' Local Union, No. 31, 47 North Clinton avenue. Brick, 1 story, 20x100 feet, slate roof, steam heating, electric lighting. Owners will build.

and marble work, brick, cement and oak floors. Architect taking revised bid from Warren-Moore Co., Colonial Trust Building, Philadelphia.

Hospital (alts.), Milford, Del. Architects, Brockie & Hastings, 1713 Sansom street, Phila.

adelphia. Owners, Milford Emergency Hospital, Milford, Del. Plans completed. Work contemplated.

Office and Storage Warehouse, Front and Madison streets, Wilmington, Del. Architect, E. C. May, Dupont Building, Wilmington, Del. Owners, Conley Bros., on premises. Reinforced concrete and brick, 1 and 2 stories, 16x40 feet and 72x34 feet, slag roof, stone foundations, electric lighting, oak floors. Owners are taking bids.

Residence (alts.), Wilmington, Del. Architect, R. C. Tindall, Wilmington, Del. Owner, Ralph Derr, care of architect. Brick and frame, 3 stories, 30x70 feet, heating and plumbing, tile work, stucco work, hardwood floors. Contract awarded to Marshall Tindall & Son, Wilmington, Del.

Office Building (alts.), 418 Edgemont street, Chester, Pa. Architect, C. W. Brazer, Crozer Building, Chester, Pa. Owner, Wm. C. Sprowl, Chester, Pa. Stone, will reface building with marble and general interior alterations. Contract awarded to Wm. Provost, Jr., Chester, Pa.

Smoke Stack, East Eighth street, Wilmington, Del., \$6,000. Architect, private plans. Owners, American Car and Foundry Co., East Eighth street, Wilmington, Del. 150 feet high. Contract awarded to H. R. Heinicke, Stephen Girard Building, Philadelphia.

Office Building (add.), foot of Madison st., Wilmington, Del., \$3,500. Architect, private plans. Owners, Wilmington Gas Co., on premises. Brick, 1 story, 24x38 feet, slate roof, concrete floors. Contract awarded to J. A. Bader & Co., 923 Market street, Wilmington, Del.

Tannery (alts.), Wilmington, Del., \$1,000. Architect, private plans. Owners, Farmers' Products Co., South Market street, Wilmington, Del. Alterations to walls. Contract awarded to Patrick Raley, Wilmington, Del.

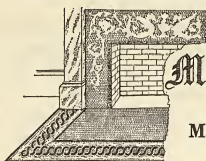
Emergency Hospital Buildings (26), U. S. Naval Hospital, Ward's Island, N. Y., Spec. 3307. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, brick, steel, hollow tile, concrete foundations, ready roofing, concrete and composition floors, metal lath, hollow metal skylights, roof ventilators, waterproofing, steam heating, electric wiring, asbestos pipe covering, plastic and wall board, screening. Contract awarded to Warren-Moore Co., Colonial Trust Building, Philadelphia.

Fuel Oil Storage Plant and Equipment, Spec. 3369, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks,

Miscellaneous Construction News

Residence (alts. and add.), Claymont, Del. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owner, E. H. Worth, Claymont, Del. Stone and brick, 2½ stories, 38x27 feet 8 inches, shingle roof, stone foundations, hot water heating, electric lighting, tile

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Navy Department, Washington, D. C. Boiler House, 3 stories, 65x47 feet, steel frame, concrete floor, slag roof, metal lath, steel sash, metal covered doors, ventilators; Heater House, frame, galvanized sheet steel roofing and siding, mechanical and electrical equipment, piping, etc. Contract awarded to F. W. Mark Cont. Co., Finance Building, \$570,000.

Building "F" and Nurses' Quarters, Spec. 3371, Brooklyn, N. Y. Architect, private plans. Owners, U. S. Government, care of C. W.

Parks, Chief, 613 G street, N. W., Washington, D. C. Brick and reinforced concrete, 4 stories, 156x275 feet, and 3 stories, 156x276 feet, composition roof, concrete and composition floors, hollow tile, metal lath, safety treads, waterproofing, steam heating, electric lighting, tile and marble work, rolled steel sash, galvanized steel skylights, tin-clad and kalamein doors, iron stairs. Lowest bidder, White Fireproof Const. Co., 286 Fifth avenue, New York City, \$668,000.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Residences (14), Blatinore, Cobbs Creek and Fifty-ninth street, Philadelphia, \$71,000. Charles Armstrong (O and C), 44 South Fifty-eighth street, Philadelphia. Brick, 2 stories, 16x44 feet, hot water heating, slag roof.

Sun Parlor, Reed, south of Fifth street, Philadelphia, \$8,000. Mt. Sinia Hospital (O), Fifth and Reed streets, Philadelphia. Wm. Linker Co. (C), 832 Cherry street, Philadelphia. Brick, 1 story, 16x21 feet, slag roof, stone foundations, wood floors.

Store and Dwelling, 2501 South Sheridan street, Philadelphia, \$1,500. I. Kron (O), on premises. C. Gardner (C), 1718 South Fifth street, Philadelphia. Repair fire damages.

Shed, 1525 North Hutchinson street, Philadelphia, \$400. Ritter Co. (O), on premises. H.

P. Werner (C), 3242 Germantown avenue, Philadelphia. Brick, alterations.

Store and Dwelling, 460 North Eighth st., Philadelphia, \$3,000. Louis Fein (O), 527 North Marshall street, Philadelphia. M. Yelin (C), 712 North Franklin street, Philadelphia. Brick, new baths, partitions.

Factory, 1882 East Venango street, Philadelphia, \$10,000. Ajax Wool Processing Co. (O), 1882 East Venango street, Philadelphia. Brick, 1 story 40x100 feet, concrete foundations.

Stand Broad and Delancey to Pine streets, south side, \$6,000. Liberty Loan Committee (O), Lincoln Building, Philadelphia. Charles Gilpin (C), Harrison Building, Philadelphia. Lumber stand.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store and Dwelling, 2321 East Orthodox st., Philadelphia, \$300. C. Glinka (O), on premises.

ises. A. H. Nagorski (C), 2416 Orthodox st., Philadelphia. Brick, alterations.

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Garage, 4332 Penn street, Philadelphia, \$900. John Toland (O), on premises. Cunningham & Bartholomew (C), 4326 Paul street, Philadelphia. Brick, slag roof, stone foundations, 1 story, 38x14 feet.

Garage, Fifty-seventh and Woodland avenue, Philadelphia, \$14,000. Gibson McIlvaine Co. (O), Fifty-eighth and Woodland avenue. Smith-Hardican Co. (C), 1606 Cherry street. Brick, 1 story, 60x129 feet.

Factory, Germantown and Sedgley avenues, Philadelphia, \$800. Air Reduction Co. (O), 120 Broadway, New York City. James Mitchell (C), Jersey City, N. J. Leading platform, concrete.

Garage, 858 North Orkney street, Philadelphia, \$3,000. Ida Abramson (O), on premises. B. Aroov (C), 992 North Seventh street, Philadelphia. Brick, 1 story, 20x50 feet, cement floor, slag roof, stone foundations.

Laboratory, 1720 Lombard street, Philadelphia, \$2,000. Polyclinic Hospital (O), Eighth and Lombard streets, Philadelphia. Alfred Zellfelder (C), 151 South Broad street, Philadelphia. Brick, 4 stories, 8x6 feet, metal skylights.

Service Station, 1920 Market street, Philadelphia, \$900. Atlantic Refining Co. (O), Philadelphia. Metzger & Fisher (C), Oris Building. Brick, 5x6 feet, slag roof, stone foundations.

Store, 4808-06 Frankford avenue, Philadelphia, \$300. B. H. Abrams (O), on premises. Rush Bros. (C), 1100 Fillmore street, Philadelphia. Brick, alterations.

Fence, Twenty-third and Twenty-fourth, on Carpenter street, south side, Philadelphia, \$600. Philadelphia Roll and Machine Co. (O), Twenty-fifth and Washington avenue, Philadelphia. Fence, 10 feet high, 55 feet long.

Dwelling, 22 and 24 South Mole street, Philadelphia, \$2,500. A. S. Tourison, Jr. (O and C), 7014 Boyer street, Philadelphia. Brick, 1 story, 18x55 feet.

Store and Dwelling, 2321 North Fourth street, Philadelphia, \$400. Liba Reamer (O and C), 307 Queen street, Philadelphia. Brick, two-story addition, 12x10 feet, stone foundations.

Manufacturing Building, States Road and Conly street, Philadelphia, \$16,000. Super Glass Co. (O), Philadelphia. Walter R. Potts & Bro. (C), 1023 Wood street, Philadelphia. Frame, 1 story, 106x48 feet, 46x78 feet, stone foundations.

Manufacturing Building, States Road and Conly street, Philadelphia, \$4,000. Super Glass Co. (O), Philadelphia. Walter R. Potts & Bro. (C), 1023 Wood street, Philadelphia. Frame, 1 story, 18x48 feet, stone foundations.

Garage, Johnson and Jefferson streets, Philadelphia, \$5,000. George H. Molloy (O), 1449 Spring Garden street, Philadelphia. H. H. Burrell (C), 206 South Quince street, Philadelphia. Brick, 1 story, 90x84 feet.

Store and Dwelling, 1535 Porter street, Philadelphia, \$600. Charles Saug (O), on premises. Di Sciardo (C), 928 Tasker street. Brick, 1 story, 12x12 feet, cement floor.

Dwelling and Saloon, 1149 North Third st., Philadelphia, \$400. M. Rapp (O), on premises.

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Otto Malz (C), 2101 North Lawrence street, Philadelphia. Alterations, brick.

Theatre, 1710 Susquehanna avenue, Philadelphia, \$500. Allman & Greek (O), on premises. L. A. Fowler (C), 2002 North Eighteenth street, Philadelphia. Cement foundations for organ.

Store and Dwelling, 710 Oak Lane avenue, Philadelphia, \$500. George Werner (O), on premises. C. C. Hemmerly (C), Oak Lane P. O., Pa. Brick, alterations, bulks.

Shop, 912 Locust street, Philadelphia, \$350. H. Dodge (O), New York City. B. Barrieh (C), 715 St. James, Philadelphia. Repair slag roof. Storage Building, 950 Beach street, Philadelphia, \$3,500. Ajax Metal Co. (O), on premises. M. Ward Esby, Inc. (C), 1420 Chestnut street, Philadelphia. Repair fire damages.

Mfg. Garage, Lime Pit House and Foundation, Eighteenth and Cambria streets, Philadelphia, \$51,000. Linde Air Products Co. (O), Forty-second street building, New York City. W. W. Lindsay & Co. (C), Harrison Building, Brick, 1 story, 14x40 feet, 36x22 feet, concrete roof, stone foundations.

Storage Building, Pennack Creek and Frankford avenue, Philadelphia, \$6,000. Summerdale Dyeing and Finishing Co. (O), Holmesburg. J. A. Hand (C), 47x103 feet, slag roof.

Store and Dwelling, 617 East Passyunk avenue, Philadelphia, \$800. Sacks & Frachtenberg (O and C), on premises. Brick, alterations.

Manufacturing Building, 1507 Germantown avenue, Philadelphia, \$1,800. C. Whitaker (O), Franklin street and Girard avenue, Philadelphia. F. C. English (C), 1608 North Carlisle street. Repair fire damage.

Factory, Beach, north of Glenato street, Philadelphia, \$60,000. Clayton Nickols (O), Beach and Poplar streets, Philadelphia. F. L. Hoover & Sons (C), 1023 Cherry street, Philadelphia. Repair fire damages.

Church, 1721-23 Spring Garden street, Philadelphia, \$2,500. Philadelphia School of Bible (O), 1720 Arch street, Philadelphia. Wm. Steele & Sons Co. (C), Sixteenth and Parkway, Philadelphia. Brick, alterations.

Garage, Germantown and Luzerne avenues, Philadelphia, \$3,000. James Bradu (O), 1722

Huntingdon street, Philadelphia. Harry Y. Yonger (C), 4430 North Nineteenth street, Philadelphia. Brick, 1 story, 17x125 feet, slag roof.

Garage, State Road and Deveraux street, Philadelphia, \$600. Marlin-Rockwell Corp. (O), on premises. H. H. Wehmeyer (C), 508 West Cumberland street, Philadelphia. Frame, 36x20 feet, cement floor, 1 story.

Store and Dwelling, 1318 North Seventh street, Philadelphia, \$2,000. Jake Parise (O and C), on premises. Brick, alterations.

Store and Dwelling, Seventh and Mifflin streets, Philadelphia, \$2,200. J. Sigil (O), on premises. M. Cylinder (C), 521 Mifflin street, Philadelphia. Brick, alterations.

Dwelling, 1338 North Twenty-first street, \$1,600. Women's Medical College of Pennsylvania (O), 2121 North College avenue, Philadelphia. Frank I. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. Interior repairs, alterations and heating.

Shop, 3314 Benner street, Philadelphia, \$600. James J. Johnson (O), on premises. Frank W. Zebley (C), 6022 Hegerman street, Philadelphia. Frame, 2 stories, 18x25 feet, slag roof.

Storage Building, 1002-12 Diamond street, Philadelphia, \$2,000. Miller Storage Co. (O), on premises. Frank I. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. Brick, alterations.

Storage Building, Bustleton Pike, south of Murray street, Philadelphia, \$1,000. Raymond Erwin (O), Bustleton, Pa. Wm. Curry (C), Bustleton, Pa. Frame, 1 story.

Rest Room, 1930 South College avenue, Philadelphia, \$1,000. Berean Manual Training School (O), on premises. Frank E. Wallace (C), 1220 Chancellor street, Philadelphia. New heating system, minor alterations.

Store and Dwelling, 160-62 North Eighth street, Philadelphia, \$2,400. John H. Chestnut (O), Perry Building, Philadelphia. Beach & Co. (C), 1436 South Front street, Philadelphia. Brick, new bulks.

Store and Dwelling, 2720-22 North Second street, Philadelphia, \$4,200. Thomas J. Clark (O and C), 2725 North Second street, Philadelphia. Stone, brick, cement floor, 36x120 feet, slag roof.

We are all in one boat, whatever the conclusion may be. We are working for one another, and when we stop working for one another, then that is the end of all of us. It is a lesson, my friends, that we might well take to heart, not only for war purposes, but for peace purposes; and that is that we are living from day to day, from hand to mouth, not on the labor of the past, but on the labor of the present. And so in this war, where we are learning that lesson, we must be prepared to back up the men who are in the trenches by a united industrial front back of the trenches, in the workshops, in the mines, in the forests and on the farms here at home. That is where the war policy of the Department of Labor comes into this general subject.

Must Get Together Industrially.

We must get together industrially as well as militarily. That is the lesson of this hour, and that is the lesson that I want to impress; and while I cannot speak for the administration, I can quote the head of the administration, who has this country behind him in his policies to-day. His appeal, almost every time he has spoken, and very recently he has repeated it, has been to employers and employed, to get together in order to win this war at home, by helping the soldiers who are in the trenches abroad.

Now, it is that point that I wish to emphasize. Employers and workmen must get together industrially, and wherever the fault if they do not get together industrially, on that side the condemnation must rest.

Meaning of Wage Earner.

There are business men, probably, who have never analyzed what the expression "wage-earner" means. They probably think of labor in terms of their ledgers—as an item of labor cost without the human element in it. Many business men have confessed to me, that they never realized until they got to Washington, in the Department of Labor, that there was any human element in labor. One of them said, "Oh, I know John Smith. He is a working man. He is a good fellow and I like him. He is human. And I know Pete Jones. He is a working man. He is a bad fellow, and I do not like him. But labor in the mass never conveyed to me any other idea than the item of labor cost on my ledger."

I think the wage-earner is simply a business man. We are all business men, or workers, if we have any right to live in a modern community. There are some men living on the

GOVERNMENT'S LABOR POLICIES

By Louis F. Post, Assistant Secretary of Labor.

We must fight this war to the finish, and if we will do that, it is not enough—and we have been told it again and again—to have soldiers in the trenches. We must have industry back of the trenches to keep the soldiers alive.

The war has taught us one great economic lesson, that some of us knew before in the abstract, and that many of us did not really feel. It has taught us that no people are living on the saved-up wealth of the rich men

of the past. It has taught us that whether a man be poor or rich, he is eating the bread that is raised to-day, and not the bread that was raised fifty years ago by thrifty ancestors. We are living from hand to mouth, and we all know it now. We know that they are not using ammunition at the front that was made years ago. They have to be supplied with ammunition as fast as they use it.

But that is not a condition that applies to the war alone. It is the general condition.

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labor of others, and there are other men who are living partly on the labor of others and partly on their own. They are not living altogether by the sweat of their brows. But men who are earning their living are laboring men, whether they work for wages, or whether they work for what is called profit in conducting a business. They have to work together, we have learned that in the war, in order to unify industry and produce results.

Wage Worker a Business Man.

Now, the wage worker is a business man, and the only thing that distinguishes him from other business men is this, that the wage worker can never have but one customer at a time. In the very nature of his business, he can never have but one customer at a time, and that is his employer. If that customer leaves him, he has to spend some time in finding another customer before he can go on with his business.

The object of the Department of Labor is to look after the interests of the wage-earners of the United States. That is the function that is ascribed to it. When Secretary Wilson came into the office of Secretary of Labor, he laid out this policy, and he has followed it consistently and conscientiously ever since. It is this: The Department of Labor is created to supervise and conserve the interests of the wage earners of the United States. That is what Congress has charged it with doing. As a matter of administration, those interests must be conserved by this department with proper regard for all the just interests of every other class in the United States. In other words, as he described it: "This department bears much the same relation to labor and business that the State Department bears to the United States, and the other governments of the world. The State Department owes its loyalty to the interests of the United States, but it would not properly represent the interests of the United States unless it did so with a fair regard for

the interests of all the other peoples of the world."

And so with the Department of Labor. It represents primarily the wage-earning interests, but it would not represent them properly if it did not represent them with a due regard to all other industrial interests.

Problems of Labor Department.

Now, that was the condition of the Department of Labor when the war came upon us. At that time we had four bureaus. There was a bureau of naturalization; the children's bureau, the immigration bureau and the bureau of labor statistics, the oldest of the four. We now have some fifteen or sixteen distinct bureaus, all of them except one having grown out of the necessities of the war.

Now, in the development of the policies of the Department of Labor, after the war came, the most important thing that was done, in all probability, was the creation of the War Labor Board.

What we must recognize here is not only the power, but the patriotic duty during the war of both working men and employers, to establish collective bargainings, to get together at the same table, and make their bargainings, in order that industry may be unified, the employer and the employee alike being dependent upon each other, with the country dependent for success upon both of them.

Their patriotic duty is that they shall get together, and throw behind them the recollections of the past, and get down to business and settle their differences. That is the method I feel I can bring, literally, almost, from the administration, and literally from the War Labor Boards, and literally from the Department of Labor.

Activities of Employment Service.

In addition to that, we have the employment service. I am not going to enlarge upon that. But the employment service is providing means all over the country for developing labor. Now, the manufacturing industry can-

not get over a real shortage of labor; that is impossible. But our trouble mostly is not a shortage of labor, but a maldistribution of labor, and that condition can be overcome. We proved that in the farming situation this summer. The farmers had hysteria for want of labor. They were shouting into our ears with a megaphone that the harvest would all go to the eternal how-wows because they could not get labor. Well, the harvests are gathered, and the biggest crop that this country has seen in a long time is being turned through the thrashing machines to-day. How was it accomplished? Simply by bringing labor together, and not going into hysterics over a so-called shortage of labor.

Conscription of Labor.

Now, that shortage of labor has raised another cry which I want to say one word about, and leave one end of a message with you for your consideration. That cry is that labor will have to be conscripted. Well, now, that is a cry to doubt the correctness of. The argument is that we conscript our soldiers, and therefore we must conscript labor. Well, it seems to me we ought to conscript our soldiers. If there is any true ground of complaint in that connection it is that we have allowed the volunteer system to persist too far. Where a public duty like that of defending the country is concerned, I would make the age from 18 to 75, and conscript right and left, and put every man in his proper place; and if that was in the trenches, I would put a man in the trenches; and if it was in a munitions factory, I would put him in a munitions factory; and if it was in a lawyer's office, I would put him there; but I would put every man where he belonged. I cannot say, however, that I am speaking for the administration in that respect. That is what I would do.

Now, it is proposed to do away with the shortage of labor by conscripting labor. I can speak for the policy of the Department of Labor in that respect, because it has maintained that policy from the beginning. I almost quote Secretary Wilson when I say that the time may come when we shall have to conscript workers in the mines, the forests and the factories, just as we conscript soldiers for the trenches. The time may come; but, in the name of democracy for which we are fighting, it must not come until we have first conscripted the places in which those conscripts shall work.

In other words, the democracy of this country will not stand for the conscription of only the men who work for the profit of other

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men. And if we are to have industrial conscription, it must be like our military conscription; the conscripted men must work for Uncle Sam directly, and for nobody else. And when we have decided to make the workshops, the mines and the forests our trenches back of the trenches, then and not before shall we be able to say in the name of democracy, we conscript men to work in those places.

We cannot have conscription and claim to be democratic as long as conscription means working for the profit of other people. And while I have no specific condemnation of any individual or concern charged with profiteering, we must not forget for one moment that there has been profiteering, and a part of the labor trouble since the war has been because large bodies of working men have been convinced from what they saw and heard that they were being made victims, while others were profiteering on the war.

Must Be No Profiteering.

That time and condition are fairly well past, and we may say that we are all joining in now without reference to profiteering. Most men are beginning to feel in this country today that it will be a crying shame for any rich man to come out of this war even as rich as he was when the war began, and it will be equally a crying shame for any man, rich or poor, to come out of this war essentially and notably richer than he was when the war began.

We owe it to our country to see that there is no profiteering, and I am willing to bring that down to the poorest man who works, provided you will begin with the biggest man who makes the biggest profits. Let us cover the whole country with the idea that there must be no profiteering. It has done harm, but we can now push it aside, and get over it, and make better adjustments, and get our business workers and our wage workers co-ordinated, united into one great army back of the army in the trenches, to win this war for democracy.

Line Between Business and Privilege.

Business men and working men should learn to draw the line between business and privilege. The line I draw is this: The business man is a working man after his kind; a producer, and a useful man. The owner of a privilege, whether he is a business man or not, is simply a parasite upon the community; and that condition will have to end, if we are to have the kind of peace we are fighting for. The kind of peace I estimate that we are fighting for is a peace that shall put an end to the mad dog of the world; that shall put an end to the autocracy that has dominated Germany for fifty years, and is trying to dominate the world; that shall put an end to what is going on "over there"; and then

that there shall be brought about not only a peace, but a democratic condition for the future that will guarantee the prevention of all future wars.

ENGLISH BUILDING PRICES AND ECONOMY IN FUTURE WORK.

(Continued from Page 536.)

of a transition period such as this is to determine accurately the new conditions under which we shall have to work. There is also a strong tendency to run along accepted lines in any such complicated field of activities as modern building has become. We are reluctant to leave the anchorage of experience to which we may have navigated ourselves with much pains, and nothing short of this general upheaval would have made possible changes that are happening in an almost revolutionary way.

Generally, it seems not at all unlikely that we shall revert in a measure to older methods still than those obtaining in immediately pre-war days. In fact, the era to which the war put a period was not one that is likely to be looked back upon with much pride. Little attention was paid, for instance, to the fullest possible use of local materials in the design and erection of buildings. Imported timber, bricks, slates, stone and fittings were gathered together from the ends of the country, and, such was our weird economic system, often at a considerable advantage over local prices. The increased cost of transportation will tend to readjust this anomaly somewhat in the future. Timber, employed upon anything like a pre-war scale, we can count out; its use will be restricted to joinery and essential fittings. On the other hand, worked metal should be easy to obtain, in view of the multifarious munition factories and plants that will be available for the arts of peace, and we shall doubtless find such matters as

the stone mullion and metal casement coming again into general favor economically as well as artistically.

An idea was propounded some time ago for paneling doors with sheet asbestos as another means of economizing timber. The use of concrete for floors both up and down (referred to before) and finished off with some jointless composition is likely to be followed widely.

Concrete roofs, either flat or pitched, are yet another possibility, and the latter in certain cases where expense is not a prime consideration may possibly be covered with slates or tiles. In the country, cottage roofs will be covered with asphalt sheeting or some similar material, and so save weight of timber otherwise necessary for slates or tiles.

Partitions can be economically and simply erected in plaster slabs. A deal of external timber in fascias, barge boards, sham half-timber framing, architraves, etc., can be dispensed with without detriment to the design.

Lead, again, is an expensive commodity, and was considerably appreciating in cost before the war. However useful this ductile metal is for gutters, flashings, dormer coverings, and so on, its employment will have to be restricted and cement or sheet asphalt substituted wherever possible.

In fact, summing up the position, cement and metal are going to play the parts of the principal constructive agents of the immediate future, used in conjunction with the basic local material, brick or stone; at any rate, as far as the shells of our buildings are concerned. These materials will be easily procurable, and their handling is simple, and after we get over the difficult process of revising our ideas there should still be plenty of scope left for the craftsman in the fitting up and external adornment of our buildings. His work, indeed, may show up even better for the severity of its future setting.—"London Carpenter and Builder."

THE BUSINESS END OF BUILDING

By Edwin L. Seabrook.

Estimating is the vital part of the contracting business. The estimate can put the business into bankruptcy or place it in a flourishing condition. Correct estimating depends upon a great many factors, and the estimator must know a great deal about many things. Business methods are focused in the estimate; handling labor and right buying of material are also component parts of it. The estimator in large and complicated construction work holds the financial future of his firm at the point of the lead pencil. This is no less true of the small building contractor.

Despite the vital importance of estimating,

many go at it in a most haphazard manner rather than as a serious business problem involving profit or loss and the financial stability of the business.

Accurate estimating is possible only by comparing the quantities of labor and material actually used with the amounts estimated. In order to do this it is necessary to keep in some permanent form a record of the quantities used in compiling the estimate. Some element of uncertainty enters into estimating, but there should be no "guess work" permitted on such a vital business problem. Estimating should be based on experiences from

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contracts and work already performed. This experience will be available if proper accounting methods are practiced. This involves the keeping of an accurate record of each piece of work, big or little, of the amount of labor and material used. How is it possible to intelligently make an estimate or price when it is not known whether the exact kind or similar work previously performed yielded a profit or made a loss?

In spite of this self-evident fact, many go on making estimates without the slightest idea as to whether previous work of a like nature was done at a profit or a loss. From this it will be seen that estimating is closely allied to accounting and bookkeeping. The competent estimator must draw his data from several sources: prices of material, labor, experience on similar work, and a bookkeeping or accounting system which will show, among other things, the cost of conducting business or overhead.

Every estimate or price is or should be composed of four elements: Labor, Material, Overhead, Profit.

Even a casual study of the composition of an estimate or price shows that it is not correct if it does not contain these four elements. It is, therefore, quite apparent that the proper method is to build up the estimate or put it together from the elements that compose it. While these four elements are related to each other, each is distinct so far as the quantity or amount is concerned. When the estimate is completed it should be possible to know the exact amount allowed for each element. When the contract has been completed the estimated amounts should be compared with those actually used in the performance of the work.

The building contractor is no less a merchant, because he applies the material he buys to buildings, than one retailing merchandise. But he has assumed two jobs instead of one. The compilation of a price, and distribution of the operating expense, differs radically between merchandising and contracting.

In merchandising the selling price is placed on the article after its cost is known.

In contracting the selling price is placed on the work before the cost is known.

The merchant takes his cost from the invoice; the contractor must estimate the amount of labor and material required, and is never certain of the cost until the work is completed. The merchant in naming his selling price has no fluctuating factors, such as labor and material. There being but one method of applying "overhead" and profit, price uniformity of merchandising naturally follows. Evenness and stability of prices are the results of such uniform application in merchandising.

Unfortunately this uniformity of cost of overhead and profit application does not exist in contracting. The contractor must estimate,

and there is an element of uncertainty; and because of this uncertainty many contractors take a gamble. If, like the merchant, they knew exactly where cost ended, there would be no disposition to take a chance. Then again, there is no such thing as a perfect cost system. The exact cost of an article, where more than one line is taken on, is not determinable. For all practical purposes, however, the approximate cost, or overhead, can be determined. Different methods of distributing expense, or overhead, produce different estimates or prices. The cost of conducting business is of necessity distributed on a theory, and these theories are legion. A dozen firms will have as many expense distribution theories. None of these is perfect, otherwise it would be a fact and not a theory. Ten firms, with as many theories of expense distribution, will make ten different selling prices. The overhead enters largely into the contracting business, and the distribution of this expense is the reason for variation in estimates from the same plans and specifications. The percentage of overhead may be the same, but the method or theory of distributing this produces different results in the final estimate. This variation can be very forcibly illustrated by the experience of two firms in the same line of business, located in adjoining towns. The sales of both were nearly the same and both made a fair profit. One firm based its overhead on productive labor, which was 51 per cent. of this item; the other took productive labor and material combined, amounting to 22 per cent., as the basis upon which to apply the overhead. The accounting systems of both firms were excellent, and there is nothing exceptional in the ratios of expense.

Suppose these two firms are invited to estimate on the same contract, using these ratios in computing the overhead in the estimate.

Estimate No. 1.

Cost of Material.....	\$200.00
Cost of Labor.....	340.00
	\$540.00
Overhead, 51% Productive Labor.....	173.40
First cost	\$713.40

Estimate No. 2.

Cost of Material.....	\$200.00
Cost of Labor.....	340.00
	\$540.00
Overhead, 22% of Labor and Material. 118.80	
First cost	\$658.80

It will be seen that there is a difference of \$54.60 on the item of expense alone between the two estimates when first cost is reached, which will be increased, if profit is added on a percentage basis. All good estimators will admit that this variation between the two estimates is entirely too great for so small a total amount. It is self-evident that

this variation is due entirely to a lack of uniformity in applying the overhead. If the quantities are reversed—Productive labor, \$200; material, \$340; using the same expense ratios—there is still a difference of \$16.80. While this sum is not large in comparison with the total amount of the estimate, it is based solely on one item, and from that standpoint the variation is too large.

Let us look at this difference of \$54.60 from another angle: Suppose two men varied in their estimates of \$54.60 on the correct amount of material, \$200. It is quite evident that some one would be wrong. Is there any more reason why two firms should be \$54.60 apart on the "overhead" item of the estimate than they should be on material? If it is essential to have uniform plans and specifications upon which to estimate, is it not also reasonable that there should be some uniformity in estimating methods? This does not mean that every firm should have the same bookkeeping system, but that they should approach the cost of doing business and the application of it on the same basis, or by the same method. General contractors often express surprise at the great variation in the bids of sub-contractors. While much of this may be due to loose methods, guess work and mistakes, undoubtedly a large portion is due to a lack of uniformity in applying the overhead.

The forms and practices of estimating and price-making almost defy enumeration and description. These vary from the clumsy, careless, unreliable, all the way up to methods that are as near perfection as possible. These forms and practices all fall under three general systems: Rule of Thumb, Lump Sum, Unit of Labor and Material. The first step is taking the quantities from the plans, etc. The care with which this should be done is too self-evident to need any comment. A permanent record in some form should be made of the estimate; this should be in a book or on make-up sheets. Provision should be made for a comparison when the contract is completed. Estimates should not be made on scraps of paper. If the estimate is too trivial to be well done, it had better be left alone.

A few estimating examples drawn from actual business practice will illustrate the proper and improper methods of compiling prices. The principles and methods of correct estimating are the same regardless of the amount, and it is these upon which the attention is directed. As illustrated above, every profitable estimate or price will be composed of these four essentials:

Cost of Material.....	\$.....
Cost of Labor.....	\$.....
Expenses, Conducting Business.....	\$.....
Cost, or safety point.....	\$.....
Profit	\$.....
Price, or Estimate.....	\$.....

(Continued Next Week.)

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Reserve for Premiums	10,630,740.40
Reserve for Losses	4,419,000.00
Reserve for Taxes	950,000.00
Reserve for Sundries	160,000.00
Surplus	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders	\$ 12,317,502.26
Losses Paid Since Organization	192,518,273.33

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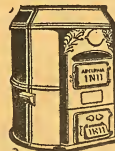
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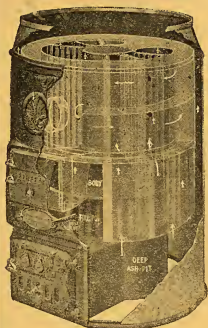
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October 2, 1918

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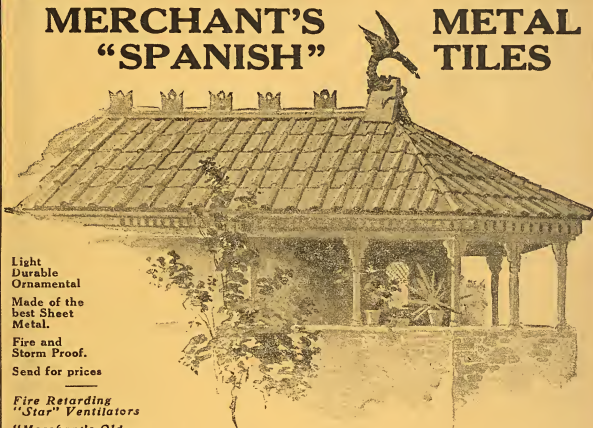
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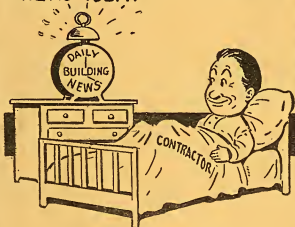


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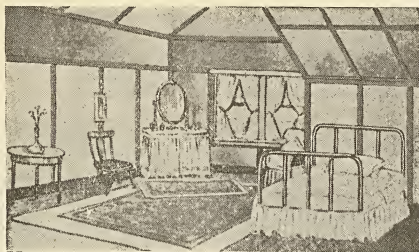
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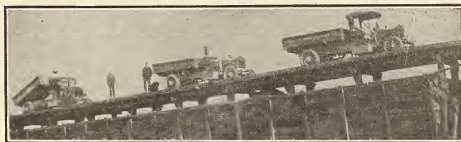
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October 2, 1918

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As The Editor Sees It



THERE has been so much uncertainty during the past year concerning the status of the building industry for the duration of the war, that the latest ruling issued by the War Industries Board, in reference to this and other industries, will come as a great relief.

The Board has issued an official list of industries which are to be accorded preference, as well as a detailed statement showing what construction may be undertaken without a permit and providing a means of giving immediate consideration to proposed construction through local boards.

The industries which are given preference are listed in four classes, in the order of their importance. Class I includes:

(a) Direct Government work and war activities.

(b) Hospitals and sanitariums.

(c) Shipbuilding and railroads.

(d) Practically all plants engaged in the production of food, fuel, and iron and steel products.

Class II includes:

(a) Public utilities and plants engaged in the manufacture of

1. Brass and copper products.

2. Iron and steel products, such as tools, wire rope, steel rails, ferro-alloys, and mine producing metals and ferro-alloy minerals.

Class III includes secondary items of products listed in Classes I and II.

Class IV includes:

(a) The manufacture of

1. Farm implements.
2. Fertilizers.
3. Textiles.
4. Soap.
5. Pulp.
6. Paper.
7. Drugs and medicines.
8. Chemicals.
9. Boots and shoes.
10. Bags.
- (b) Laundries.
- (c) Newspaper plants.

This classification serves to put the business of the country on a fairly definite war basis and from it we may judge in just what direction construction work will be most active. Since every facility must be employed to assure efficiency and speed in the work of these war essentials, industrial construction work, will, of course, be more or less confined to these war industries—however, the War Industries Board does not intend that this preference list should act as an embargo list against other industries.

All construction work connected with the War and Navy Departments, the Emergency Fleet Corporation, the Bureau of Industrial Housing and Transportation, the United States Housing Corporation, the Railroad Administration, public highway improvements and street pavements approved by the United States Highways Council, and repairs for extensions to existing buildings involving a cost not exceeding \$2500. Any other proposed construction, must be passed upon by local Councils of Defense.

This ruling merely indicates further that all building which is, in any way, war essential, will take preference. Thus public buildings and many industrial enterprises must be put aside until the present need is met. As for residential building, this will confine itself, on the whole, to industrial housing. The necessary building in connection with war industries, industrial housing, town planning utilities, will serve to keep general contractors more than busy and the alterations which, in other cases will have to tide over until the end of the war, will serve to keep the small contractors going. We have, on other occasions, argued for the erection of better, up-to-date farm buildings as a matter of war expediency, and the increasing food needs of the Allies, as well as of our own country, will do much to encourage construction work along agricultural lines.

Now that there is a definite basis upon which to work, we feel sure the situation will lose much of its uncertain and disquieting aspect.

* * *

ANOTHER proof of the fact that America is alive to her possibilities and responsibilities after the war, and that she must be prepared for them, is evidenced in the "Wake up America" Campaign inaugurated by the Seattle Chamber of Commerce and Commercial Club, in reference to our "Merchant Marine Fleet." In support of this movement, Phil Norton, Director of Publicity, Seattle Chamber of Commerce

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and Commercial Club, has contributed the following:

Answers to a symposium call sent out recently by the Seattle Chamber of Commerce and Commercial Club showed unanimity in the belief of all business men that prosperity and progress, after the war, will depend largely upon the success in competitive world-trade of the Nation's Merchant Marine Fleet of 25,000,000 tons, as an extension to all world ports of the railroad service, thus opening up vast new markets for American products.

Without this Government-owned fleet, operated in connection with the railroad system, meeting all competition backed solidly by the American people, the consensus of opinion was that the United States would again become the Rip Van Winkle of the seas. Without exception, a large number of prominent business men offered the opinion that the success of the United States Fleet in world trade competition—the fleet built and owned by the American people—vitality affected the prosperity of every farmer and business alike in every section of the country.

The call was made to rouse dwellers in the interior to recognition of the importative need of building up and making a success of the Merchant Marine, now the greatest in the world and owned by all of the American people.

Prior to this war, practically all of the American products were carried to foreign markets by vessels of other countries and disposed of through foreign middlemen. Naturally, American welfare and prestige suffered and the Nation's prosperity depended upon the home markets. Henceforth, with the support of all the people, the new Merchant Marine Fleet will change this, opening up to American enterprise the markets of all the world. Never again, if co-operation is assured, will hard times come through over-production, for there will be an ample market and never failing demand for all the agricultural and industrial surplus that American labor can produce.

WHEN THE HEAD PULLS OFF.

All carpenters know what a tantalizing matter it is to remove a nail from which the head has pulled off, especially if little of the nail projects above the wood. The following method will generally permit the nail to be removed with ease. Drive another nail by the side of the decapitated one, choosing for the purpose one that is somewhat larger. The headless nail may now be pried over into the opening made by withdrawing the second nail. It is then an easy matter to pick it out with pliers.

THE LIBERTY LOAN FEEDS AND CLOTHES OUR SOLDIERS.

Since the beginning of the war, we have spent for Army use \$37,000,000 for flour; \$14,000,000 for sugar; \$43,000,000 for bacon; \$12,000,000 for beans; \$9,000,000 for canned tomatoes, and \$3,000,000 for rice. These are only some of the large items in our Army's bill of fare. We have spent \$126,000,000 for shoes; over \$500,000,000 for clothing, winter and summer; nearly \$150,000,000 for blankets.

Our axes for the Army have cost over \$6,000,000; our rolling kitchens \$47,000,000, and field ranges \$1,500,000. The Army is using 2,500,000 shovels costing \$1 a piece. Our motor trucks to carry supplies and ammunition cost \$240,000,000, and for horse-drawn wagons and carts we have spent \$37,000,000. Our 279,000 horses and 132,000 mules have cost us nearly \$100,000,000; to feed them has cost over \$60,000,000 and the harness for them nearly \$30,000,000.

These figures are large, but we have nearly 2,000,000 men in France and nearly as many in cantonments here, and the United States and the people of the United States, through the Liberty Loan are making these soldiers as safe and as comfortable, as powerful and effective as possible.

Every subscriber to the Liberty Loan has helped, and every subscriber to the Fourth Liberty Loan will help to win the war.

FOURTH LIBERTY LOAN SLOGANS.

Bonds Buy Food for Soldiers. Buy Liberty Bonds.

Money Means Munitions. Buy Liberty Bonds.

Bonds Build Tanks. Buy Liberty Bonds.

Bonds Build Airplans. Buy Liberty Bonds.

Bonds Build Ships. Buy Liberty Bonds.

Liberty Bond or Liberty Bound. Which will you have it?

Buy Bonds and Back the Guns that Hit the Huns.

Bonds Put the Dam in Potsdam.

Bar Barbarism by Buying Bonds.

The More Bonds the Fewer Casualties.

Save for Your Country or Slave for the Hun.

Back Your Own with the Bond You Own.

Bonds Win Battles. Buy More Bonds.

Dig In! Buy Bonds. Carry On! Buy More Liberty Bonds.

Put Your Dollars into Khaki! Buy Liberty Bonds.

Back the Fighting Men with The Fighting Loan.

The Invincible Union—Fighting Dollars and Fighting Men.

Bonds Buy Bayonets.

Buy Liberty Bonds and Keep Them.

Send the Ammunition Over. Buy Liberty Bonds.

Enlist as Our Soldiers Do. Buy Bonds and Keep Them.

Safe as the United States. Buy Liberty Bonds.

Buy To-day. Save and Pay.

He Buys Best who Buys Quickly. Buy Your Bonds Now.

Every Hundred Dollar Bond Makes A Hun Dread More.

Buying Liberty Bonds Puts "U" in the U. S. A.

Your Money Should Not Be Neutral; Enlist It in The Fourth Loan.

COMPLIMENTED BY GOVERNMENT.

Accepting contracts in these strenuous days of uncertain labor conditions on any plan other than the percentage basis is generally hazardous. But the unrest of labor and the constant vigilance necessary in the fulfilling of contracts did not cause reluctance on the part of the Barber Contracting Company, Philadelphia, in accepting the contract of the Emergency Fleet Corporation to deliver 50,000 tons of building material—30,000 tons of pebbles and 20,000 tons of sand—to the Fairview Realty Company for the Yorkship Village development at West Collingswood, N. J. On June 21st the contract was accepted by the Barber Company to deliver 40,000 tons of material before September 20. This work was completed by the employment of 16 trucks daily. The management of the Emergency Fleet was so well pleased with the prompt delivery that the officer in charge told Mr. Barber the houses at Yorkship Village were completed in record time, no faster having been made anywhere in the United States. Promptness in delivery of the sand and pebbles enabled the building contractor to proceed without a hitch. The unique delivery service of the Barber Contracting Company was so highly satisfactory that the Emergency Fleet Corporation has placed an additional order with this company calling for 12,000 tons of material to be used in construction 1,000 additional houses at the same location.

THE FOURTH LOAN IS THE FIGHTING LOAN.

As the campaign for the Fourth Liberty Loan approaches the American Army in France moves on toward Berlin. Under our own leaders the great American Army has won a notable victory.

The Fourth Loan must be a great success. The Fourth Liberty Loan is a fighting loan.

When our soldiers on the battle front are braving death, each one offering to make the supreme sacrifice for his country and the great cause, we who remain safely at home surely should give them every support, should make every sacrifice to strengthen them. If we cannot fight ourselves we can make our dollars fight.

It is a great cause for which America is engaged in this war; it is a great struggle in which the very hope of the world is bound up that is being waged in Europe and on the high seas. It is an honor to have a part in it and all Americans, all of their lives, will be proud of the part they had in it or ashamed of their failure to do their part.

The Fourth Loan is a fighting loan. Every subscriber to the Loan strikes a blow for Liberty, for Victory.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Hangar and Runway, Spec. 3463, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Bureau of Yards and Docks, Washington, D. C. Plans in progress. Owners will soon take bids.

Cooking School, Spec. 3465, Naval Home, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks. Plans in progress. Owners will take bids shortly.

Women Employees' Welfare Building, Wisahickon and Juniata streets, Philadelphia. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, American Pulley Co., on premises. Reinforced concrete, Bonanza tile covering, trussed steel, Metropolitan roof, cement floors, rolled steel sash, plumbing, heating and electric lighting. Architects are ready for sub-bids.

Stores and apartments, 2754-56 Kensington avenue, Philadelphia. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owner, A. Kahn, on premises. Brick, stone foundations, 2 stories and basement, 55x62 feet, irregular, slag roof, flush bulks, metal ceiling, marble work, tapestry brick, hardwood floors, electric lighting. Owner is taking sub-bids.

Pattern Shop, Spec. 3478, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Washington, D. C. Plans in progress. Owners will take bids in about one month.

Shipbuilding Slip (add.), Spec. 3469, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress.

Bridge, Penrose Ferry, over Schnylkill River, Philadelphia. Architect, private plans. Owners, City of Philadelphia, Department of Grade Crossings, Bureau of Survey, City Hall, Philadelphia. Steel construction (draw-bridge), wood block paving. Plans in progress. Too early for details.

Building No. 15, Allegheny and Janney sts., Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, David Lupton Sons Co., Allegheny and Tulip streets. Brick, reinforced concrete, terra cotta coping, 3 stories and basement, 180 feet 5 inchesx34 feet, slag roof, stone foundations, mastic, parquet and cement floors, hollow tile, metal lath, tile and marble work, rolled steel sash and skylights, pressed metal doors and trim, iron stairs, ornamental iron work, safety treads (rolled steel sash and rolled steel partitions reserved). Wm. Steele & Sons Co. are taking sub-bids.

Shop, Second and Luzerne streets, Philadelphia, \$10,000. Architect, private plans. Owners, Connerly & Co., Second and Luzerne sts., Philadelphia. Brick, iron, 1 story, 75x180 feet, slag roof. Owners will build.

Machine Shop, Fifty-sixth and Gray's ave-

nue, Philadelphia, \$3,000. Architect, private plans. Owners, Maris Brothers, on premises. Reinforced concrete, 1 story, 20x15 feet, slag roof. Owners will build.

Water Supply, Sewerage and Drainage System, Spec. 3396, Emergency Hospital, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W.

Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Cast iron pipe and fittings, galvanized pipe and fittings, terra cotta pipe and fittings, sump house and manholes, reinforced concrete work, brick work, waterproofing, ready roofing. Lowest bid submitted by Bruno Pizzimenti, Pitman, N. J., \$26,600.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Seaplane Hangar, Spec. 3341, Navy Yard, Philadelphia, \$205,927. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 613 G street, N. W., Washington, D. C. Steel, asbestos covered metal walls, 200x150x50 feet, concrete foundations, wood piles, composition roof, concrete floors, electric lighting, rolled steel sash, asbestos covered doors. Contract awarded to George F. Pawling Co., 1432 South Penn Square, Philadelphia.

Residence (alts.), 1128 South Forty-seventh street, Philadelphia, \$3,000. Architect, private plans. Owner, Frank Kline, on premises. Brick, 3 stories, interior alterations, changing into apartment, hot water heating, electric lighting. Contract awarded to H. H. Wehmyer, 509 West Cumberland street.

Office and Garage, northeast corner of Roberts and Stockley streets, Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, American Insulation Co., on premises. Brick and concrete, 2 stories, 83x24 feet, slag roof, stone foundations, electric lighting, cement floors. Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway.

Machine Shop, "F" and Atlantic streets, Philadelphia, \$6,000. Architect, private plans. Owner, F. K. Pierson, Jr., 726 East Allegheny avenue, Philadelphia. Brick, 1 story, 50x136 feet, slag roof, stone foundations. Contract awarded to S. J. Kennedy, 3105 F street, Philadelphia.

Stack, northeast corner Eighteenth and Lehigh avenue, Philadelphia, \$4,400. Architect, private plans. Owners, C. H. Wheeler Manufacturing Co., on premises. Brick, 135 feet high. Contract awarded to M. W. Kellogg Co., 90 West street, New York City.

Apartment House (alts. and add.), Sixteenth and Poplar streets, \$3,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owner's name withheld. Brick and stone, 3 and 4 stories, slag roof, hardwood floors, tile and marble work (heating, plumbing and electric work reserved). Contract awarded to F. I. Wintz, 1618 North Twenty-seventh street, Philadelphia.

Residences (9 pairs), Twenty-first and Chew streets, Philadelphia. Architect, H. Rex Stackhouse, 129 South Fifth street, Philadelphia. Owner, J. M. Chanton, care of architect. Brick and stucco, 2½ stories, 16x36 feet, slate roof, hardwood floors, stone foundations, hot water heating, electric lighting, tile and marble work. Contract awarded to Thos. Duff, Eighth and Wyoming avenue, Philadelphia.

Storage Building, Twenty-first and Market streets, Philadelphia, \$7,000. Architect, private plans. Owners, Gimbel Bros., Ninth and Market streets, Philadelphia. Fire damage repairs, new ready roof. Contract awarded to Charles Gilpin, Harrison Building, Philadelphia.

Boiler House, northeast corner of Howard and Norris streets, Philadelphia, \$5,000. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, Superior Thread and Yarn Co., on premises. Brick, 1 story, 22x36 feet, slag roof, stone foundations. Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia.

Ice Storage Building, 4160 Wayne avenue, Philadelphia, \$9,000. Architect, private plans. Owners, Midvale Ice Manufacturing Co., 4160 Wayne avenue, Philadelphia. Brick, 1 story, 52x82 feet. Contract awarded to E. R. Hall, 34 South Seventeenth street, Philadelphia.

Office Building, southeast corner of Twenty-first and Bainbridge streets, \$20,000. Architect, private plans. Owners, The First Penny Savings Bank, on premises. Brick, 2 stories, 24x16 feet, and 1 story, 32x26 feet. Contract awarded to James Johnston, 1721 Ludlow street, Philadelphia.

Garage (alts. and add.), 6400 Woodbine avenue, \$1,300. Architect, private plans. Owner, Max Sherritt, on premises. Brick, 1 story, 22x10 feet, slag roof, steam heating, electric lighting, cement floors. Contract awarded to Milton W. Young, Overbrook, Pa.

Garage, 632 South Fifty-seventh street, Philadelphia, \$900. Architect, private plans. Owner, W. H. Witman, 632 South Fifty-second street, Philadelphia. Brick, 1 story, 16x17 feet, slag roof, cement floors, electric lighting. Con-

"TRIDENTS" FOR
WATER, OIL,
GASOLINE, BRINE,
ETC., ETC.

"TRIDENT" METERS

MORE TRIDENTS
IN PHILA. THAN
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MAKE

PHILADELPHIA METER CO., 942 Real Estate Trust Building.

BOTH PHONES

BLACKBOARDS TILING

WILLIAM MOORE COMPANY

Tile—Slate—Marble

1506 Sansom Street, Philadelphia

ROOFING and STRUCTURAL SLATE

tract awarded to J. D. Fisher, 5424 Thompson street, Philadelphia.

Store Building (alts.), 1017 Market street, Philadelphia, \$9,000. Architects, Hoffman & Co., Finance Building, Philadelphia. Owners, L. Press & Co., 809 Chestnut street, Philadelphia. New front and interior alterations. Contract awarded to Ketcham & McQuade, 1029 Brown street, Philadelphia.

Warehouse, southeast corner of Bodine and Callowhill streets, Philadelphia, \$3,500. Architect, private plans. Owner, James Salun, 349 North Third street, Philadelphia. Brick, 1 story, 17½x63 feet, slag roof, cement floors, electric lighting. Contract awarded to Conneen Const. Co., 1737 Filbert street, Philadelphia.

Factory Building, northeast corner of Darion and Noble streets, Philadelphia, \$6,900. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, S. Rosenau Company, on premises. Brick and reinforced concrete, 1 story, 23x60 feet, slag roof, concrete floor, electric lighting. Contract awarded to W. O. Springer, 1624 Latimer street.

Chimney, Nicetown, Philadelphia. Architect, private plans. Owners, Midvale Steel Corp., Widener Building, Philadelphia. Radial brick, 218 feet high, 9 feet in diameter. Contract awarded to Heine Chimney Co., Penfield Building, Philadelphia.

Carpenter Shop, 809 Filbert street, \$1,800. Architect, private plans. Owners, Strawbridge & Clothier, Eighth and Market streets, Philadelphia. Brick, 2 stories, 32x5 feet, slag roof and general alterations. Owners will build.

Manufacturing Building (alts.), Germantown and Allegheny avenue, \$1,500. Architect, private plans. Owners, American Radiator Co., on premises. Brick house, 7x30 feet, and concrete shed for transformers. Contract awarded to James Mitchell, Inc., 76 Montgomery street, Jersey City, N. J.

Tool Hardening Building (alts. and add.), Frankford Arsenal. Architect, private plans. Owners, U. S. Government, care of Major Hunkendorn, Frankford Arsenal. Brick, 1 story, ready and tin roof, cement floors, rolled steel sash. Contract awarded to Monaghan & Losse, Inc., 3016 Chestnut street.

Pennsylvania Contracts Awarded

Silk Mill, Charles street, Nanticoke, Pa., \$20,000. Architect, Austin L. Reilly, Bennett Building, Wilkes-Barre, Pa. Owners, Liberty Throwing Co., care of H. Epstein, Nanticoke, Pa. Brick, 1 story, 100x140 feet, steam heating, electric lighting, wood floors, slag roof. Contract awarded to Adam M. Hildebrand, 91 Wood street, Wilkes-Barre, Pa.

Grade School, Summit Hill, Pa., \$20,000. Architect, J. J. Howley, Traders' Bank Building, Scranton, Pa. Owners, Summit Hill School District, care of Harry Houser, treasurer, Summit Hill, Pa. Concrete foundations, brick, 2 stories and basement, 62x72 feet, asbestos roof, hardwood floors, steam heating, electric lighting, tile work. Contract awarded to Andrew Breslin, Summit Hill, Pa.

Store and Apartments, Nanticoke, Pa., \$10,000. Architect, A. Reilly, Bennett Building, Wilkes-Barre, Pa. Owner, Chas. Wasilewski, Nanticoke, Pa. Brick, 3 stories, 34x47 feet, slag roof, pine floors, steam heating, electric lighting, tile work, metal lath. Contract awarded to C. R. Davis & Sons, 1165 Murray street, Forty Fort, Pa.

School, Nicholson, Wyoming County, Pa., \$25,000. Architects, Morris & McHale, Burr Building, Scranton, Pa. Owners, Board of Education of Nicholson, Nicholson, Pa. Frame and stucco, 2 stories and basement, slag roof, stone foundations, steam heating, electric lighting, tile and marble work, metal lath, roof ventilators, gas plant. Contract awarded to G. G. Rought Lumber Co., Nicholson, Pa.

There's one variety of advertiser who gets our Angors. This is the chap who can't afford a large space and doesn't advertise, as a regular thing, because a small space "isn't seen." Some of the biggest advertisers we have started out with small space. Ask them whether the small space is seen. If advertisers had to wait until their businesses developed to full page stature before advertising, there'd be mighty few advertisers. The big man becomes big by growth. And growth starts with the seed.

PENNSYLVANIA

Construction News

Day Nursery (30 rooms), Fourth street, north of Morton street, Chester, Pa., \$25,000. Architect, Clarence Brazier, Crozer Building, Chester, Pa. Owner's name withheld. Brick, 3 stories, 30x70 feet, slate and felt roof, stone foundations, steam heating, electric lighting, tile and marble work. Plans in progress.

Machine Shop, 2421 West Second street, Chester, Pa. Architect, Wm. Lowenthal, 1208 Chestnut street, Philadelphia. Owner, John J. Buckley, on premises. Brick, 1 story, 190x24 feet, slag roof, cement floors, concrete foundations, hollow metal skylights (lighting, reserved). Plans completed. Owners taking bids. Roger Atkinson, Builders' Exchange, Philadelphia, is figuring.

Piggery, Spring City, Chester County, Pa. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owners, State Institution for Feeble-minded of Eastern Pennsylvania, Spring City, Pa. Concrete, brick and hollow tile, 1½ stories, 309x30 feet, asbestos shingle roof, concrete foundations, cement and wood block floors, hollow tile, roof ventilators, waterproofing and dampproofing, iron work. Architect taking bids, due October 2nd at 10.30 A. M. Wm. J. Robinson, 1503 Lombard street, Philadelphia, additional bidder.

The man who doesn't advertise because he can't afford to "do it right" will never reach a position of affluence because everything worth while in the world had to have a beginning, and there can be no "get there" for the fellow who fails to make a start.

**SCALES
AND
VALVES**

The Fairbanks Company
Corner 7th and Arch Sts.
Philadelphia, Pa.

Bell Phone, Market 2210 Keystone Phone, Main 1715

**WHEELBARROWS
AND
DRAG SCRAPERS**

If you want Trap Rock or Slag, any size or grit, we are headquarters for same. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

Barrett Specification
Roof on Plant of Tabor
Ice Cream Co., Cleve-
land, Ohio. Architect:
C. D. Godey Co., Pitts-
burgh, Pa. Roofer:
Lee H. Gould & Co.,
Cleveland, Ohio. Gen.
Contractors: The Hough
Con. Co., Cleveland, O.

Barrett Specification Roofs

The roof on this plant is soaking wet 24 hours a day, 365 days in the year!

Can you imagine a more severe test than to have a *perpetual shower falling on a roof every day and night year in and year out?*

This is what happens to the Barrett Specification Roof on the Tabor Ice Cream Co. plant illustrated above.

This shower comes from the big water-cooler on top of the structure which is used for cooling the ammonia.

No ordinary roof would stand up under such conditions.

And that is why the Tabor Ice Cream Co. had its million-dollar plant protected with a Barrett Specification Roof.

Even such a severe test has no terrors for a Barrett Specification Roof because it is planned to meet just such extreme conditions.

No other roof contains as much protective waterproofing material in its construction, and that is the reason these roofs give such long and satisfactory service.

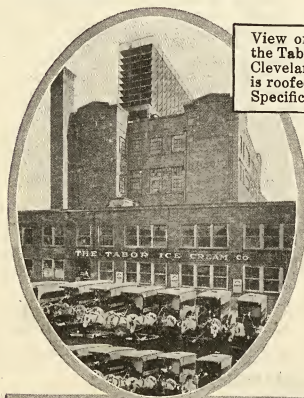
Not only do Barrett Specification Roofs last longer than others, but they *cost less per year of service*; they take the base rate of insurance and carry a 20-Year Surety Bond Guaranty.

20-Year Guaranty

We now guarantee Barrett Specification Roofs to last

for twenty years without cost for maintenance. No charge for the guaranty, for it gives us a chance to protect the good repute of these roofs. The guaranty is a Surety Bond issued by one of the

largest surety companies in America, the United States Fidelity and Guaranty Company of Baltimore. It is offered on all roofs of fifty squares and over in all cities in the United States and Canada of 25,000 population and more, and in smaller places also where our Inspection Service is available.



View of the building of the Tabor Ice Cream Co., Cleveland, Ohio, which is roofed with a Barrett Specification Roof.

The Barrett Company



New York Chicago Philadelphia Boston St. Louis Cleveland Cincinnati
Pittsburgh Detroit Birmingham Kansas City Minneapolis Nashville
Salt Lake City Seattle Peoria Atlanta Duluth Milwaukee Bangor Washington
Johnstown Lebanon Youngstown Toledo Columbus Richmond
Latrobe Bethlehem Elizabeth Buffalo Baltimore
THE BARRETT COMPANY, LIMITED: Montreal Toronto Winnipeg
Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

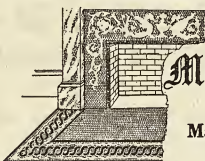
AUDUBON WIRE CLOTH CO., Inc.

AUDUBON, N. J.

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No Extra Charge, Main 3597

Brass, Copper, Steel and Galvanized Wire Cloth—Wire Window Guards—Wire Partitions and Stock Room Enclosures—Coal and Sand Screens—Sieves and Riddles—Elevator Enclosures
Auto Truck Delivery to Philadelphia



Both Phones

Italian Marble Mosaic Co.

Manufacturers and Dealers in

Marble Mosaics, Terrazzo, Tiles and Ceramics

433 SPRUCE STREET

Warehouse, 432 Manning Street, Philadelphia

NEW JERSEY Construction News

Extension to Naval Training Station, Spec. 3476, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks. Plans in progress. Owners will take bids.

Machine Shop, Camden, N. J. Architects, Penckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Eastern Machinery and Equipment Co., Camden, N. J. Reinforced concrete and brick, 2 stories, 112x45 feet, slag roof, cement floors, pine floors, hollow tile, rolled steel sash, rolling steel doors (heating, electric lighting and plumbing reserved by architects). Architects taking bids, due October 3rd. Ketcham & McQuade, 1029 Brown street; Barclay White & Co., 1713 Sansom street; Concrete Const. Co., 1618 Thompson street; Frank G. Stewart, 1619 Sansom street, Philadelphia, and J. S. Rogers Co., Moorestown, N. J., are figuring.

General Storehouse, Spec. 3346, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, 613 G street, N. W., Washington, D. C. Brick, concrete, hollow tile and stucco, 1 story, 120x105 feet, ready or tin roof, wood and cement floors, hollow tile, metal lath, steam heating, electric lighting, roof ventilators, wood foundations. Contract awarded to Norman Ker Co., 1123 Broadway, New York City.

Power House, Spec. 3406, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick and reinforced concrete, 1 story, 98 feet 9 inchesx48 feet 3 inches, concrete and pile foundations, concrete and built up roof, concrete, brick and mastic floors, hollow tile, electric lighting, steel doors, steel stack. Lowest bid submitted by Cramp & Co., Denekla Building, Philadelphia, \$38,210.

Miscellaneous Construction News

Liberty Loan Temporary Building, Washington, D. C. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Supervising Architect, Treasury Department. Brick, terra cotta, reinforced concrete, 3 stories, 293x63 feet 7 inches and 136x53 feet, composition roof, reinforced concrete floors, steam heating, electric lighting, terrazzo work, metal lath, elevators, safety treads, galvanized steel skylights, hollow metal doors and trim, damp-proofing. Lowest bid submitted by Fairbairn Building Corporation; Washington, D. C., \$353,342.

Apartment, Twenty-eighth and Washington streets, Wilmington, Del. Architect, E. L. Rice, 815 Market street, Wilmington, Del. Owner, S. H. Bayard, Eighteenth and Jefferson streets, Wilmington. Brick, 3 stories and basement, 73x41 feet, slag roof, hardwood floors (steam heating reserved), concrete foundations, combination lighting, tile work, 3 dumb

waiters, roof ventilators, tile work. Architect has received bids.

Naval Torpedo Assembly Plant, Spec. 3425, Alexandria, Va., \$950,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete, 4 stories, 299 feet 8 inchesx122 feet 9 inches, 2 stories, 114x24½ feet, built-up roof, cement, brick and wood block floors, hollow tile, metal lath, 5 electric elevators, safety treads, reinforced concrete foundations, steam heating, electric lighting, rolled steel sash, metal covered doors, steel rolling doors. Owners taking bids, due October 7th at 11 A. M. F. W. Mark Cont. Co., Finance Building; Warren-Moore Co., Colonial Trust Building; Geo. F. Pawling Co., 1432 South Penn Square, Philadelphia, are figuring.

Hospital (alts.), Milford, Del. Architects, Brockie & Hastings, 1713 Sansom street, Philadelphia. Owners, Milford Emergency Hos-

ARTESIAN WELLS DRILLED



Test Borings
Soundings

JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.

pital, Milford, Del. Brick, stone and concrete. Plans (working) about completed. Architects will be ready for bids in a few days.
Freight House, Platform and Shelter, Washington, D. C., \$60,000. Architect, Wm. A. Cookman, Broad Street Station, Philadelphia. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Concrete, 1 story, 400x32 feet, slag roof, cement floors. Contract awarded to Turner Concrete Steel Co., 1713 Sansom street, Philadelphia.

Apartment Building (alts. and add.), 1302 French street, Wilmington, Del., \$6,000. Architect, H. E. Hance, 204 West Twenty-fourth street, Wilmington. Owner, Louis Maur, on premises. Interior alterations and addition. Contract awarded to Edw. Spior, Wilmington, Del., 800 West Seventeenth street.

Maryland Construction News

Store (alts.), 106 North Eutaw street, Baltimore, Md., \$4,500. Architect, private plans. Owner, I. Sulzbacher, 2118 West North avenue, Baltimore. Flush bulk, plastering, tile and marble work, plumbing, painting, electric lighting. Contract awarded to R. H. Frazier, 224 West Mulberry street, Baltimore.

Offices (alts.), Union Trust Building, Baltimore, Md., \$8,000. Architect, Wm. W. Emmart, Union Trust Building, Baltimore. Owners, National City Co., Munsey Building, Baltimore. New partitions, hardwood floors, changing windows, etc. Contract awarded to Morrow Bros., Fidelity Building, Baltimore.

Boiler Works (add.), 929 South Howard street, Baltimore, Md., \$3,000. Architect, private plans. Owners, Novelty Steam Boiler Works Co., on premises. Steel and concrete, 2 stories, 17x70 feet. Owners will build.

Garage, Pleasant street and Guilford avenue, Baltimore, Md. Architect, D. E. Otto Kubitz, 807 Gorsuch avenue, Baltimore. Owner, E. J. Farber, 2741 St. Paul street, Baltimore. Brick, 1 story, 33x81 feet, slag roof, cement floor, electric lighting, heating, hollow metal skylights, ventilators, painting, plumbing. Contract awarded to P. C. Street, 3408 Norwood street, Baltimore.

Shop, Baltimore, Md., \$10,000. Architect, H. A. Lane, care of B. and O. R. R., Baltimore. Md. Owners, Baltimore and Ohio R. R. Co., Baltimore, Md. Brick, steel and concrete, 1 story, 120x200 feet, cement floors. Contract awarded to Frairie Bros. & Haigley, 20 Clay street, Baltimore.

Trestle and R. R. Siding, Spec. 3362, Curtis Bay, Md., \$188,900. Architect, private plans.

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HEATING

BOWERS BROS. & CO.

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Philadelphia, Pa.

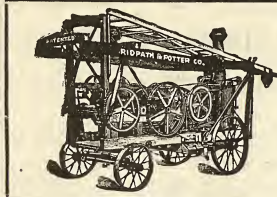
Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood and steel and concrete. Contract awarded to Piel Const. Co., 3818 Edmondson avenue, Baltimore.

Residence (alts. and add.), 2926 St. Paul street, Baltimore, \$2,500. Architect, private plans. Owner, L. S. Cooksie, 301 East Twenty-ninth street, Baltimore. Brick and stone, 3 stories, 16x125 feet, general alterations and repairs. Owner will build.

Building (add.), 1133 East Baltimore street, Baltimore, Md., \$2,000. Architect, private plans. Owner, Max D. Paul, on premises. Brick, 2 stories, tin roof, hot air heating, electric lighting. Contract awarded to A. T. Blatchley, 412 West Whitridge street, Baltimore.

Bank (alts.), 104 West Lexington street, Baltimore, Md., \$2,500. Architect, private plans. Owners, Park Bank, on premises. New front, marble, metal bulk, tile work, painting and plumbing. Contract awarded to E. B. Coon, Baltimore, Md.

Residences (14), Beech avenue and Thirty-sixth street, Baltimore, Md., \$15,000. Architect, Fred E. Beall, 1335 North Gilmoer street,



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487 Bourse Building
Philadelphia, Penna.

Baltimore, Md. Brick, 2 stories, 14x46 feet and 14½x46 feet, slag roof, steam heating, electric lighting. Owner will build.

Garage, 3505 Windsor Mill Road, Baltimore, Md., \$1,200. Architect, private plans. Owner, Margaret Horn, on premises. Concrete, 1 story, 19x22x12 feet, slag roof, cement floor. Contract awarded to Chas. P. Severson, 447 West Lakewood street, Baltimore.

Garage, 1618-20 Lancaster street, Baltimore, Md. Architect, private plans. Owner, H. B. Hoffman, on premises. Concrete, 1 story, slag roof, electric lighting. Owner is taking sub-bids.

Work Shop, Lissar avenue, west of Eighty-second street, \$500. Travers Smithurst (O), on premises. Iron on iron frame, 1 story, 16x24 feet.

Dwelling, 1821 Wensley street, \$300. O. Oldbury (O), on premises. Wm. A. Bottoms (C), 3314 "1" street. Brick, 1 story, 10x3 feet stone foundations, slag roof.

Garage, 632 South Fifty-seventh street, \$990. W. H. Witman (O), 632 South Fifty-second street. J. D. Fisher (C), 5424 Thompson st. Brick, 16x17 feet, cement floor, slag roof.

Warehouse, southeast corner Bodine and Calowhill streets, \$3,500. James Salem (O), 349 North Third street. Conneen Const. C. (O), 1737 Filbert street. Brick, 1 story, 17x68 feet, slag roof, cement floor.

Office Building, southeast corner Twenty-first and Bainbridge streets, \$20,000. The First Penny Savings Bank (O), on premises. James Johnston (C), 1721 Ludlow street. Brick, second story rear addition, new front, 1 story, brick, 32x26 feet.

Store and Dwelling, 234 Fairmount avenue, #425. M. Hirschman (O), on premises. Nathan Litmar (C), 2034 South Fifth street. Raising floor, new partitions, etc., brick.

Dwelling, 810 South Darien street, \$525. Frank Polumbo (O), 824 Catharine street. Frank P. Biletto (C), southeast corner of Seventh and Christian streets. Brick, 2 and 3 stories, 16x16 feet.

Chimney, northwest corner of Eighteenth and Lehigh avenue, \$4,400. C. H. Wheeler Manufacturing Co. (O), on premises. M. W. Kellogg Co. (C), 90 West street, New York City. Concrete foundations, 17½x17½x6 feet, brick stack, 12x135 feet high.

Dwelling, 412 South Twenty-third street, \$775. Maria Dominick (O), on premises. Tony Brassi (C), 1132 Lynn street. Brick, 3 stories, flush bulk.

Store and Dwelling, 521 Fitzwater street, \$600. Dominick Oianfrano (O), on premises. Tony Brassi (C), 1132 Lynn street. Brick, new front.

Dwelling, 6606 Woodland avenue, \$1,000. John Jugent (O), 6606 Woodland avenue. George S. Ree (C), 6949 Saybrook avenue. Two stories and basement, 16x8 feet, slag roof.

Church, northeast corner of Oregon avenue and Hancock street, \$5,000. Greenwich Light Baptist Church (O), 3926 North Seventh st. U. S. Government, J. B. McClelland, agent for Philadelphia (C), Quartermaster, Greenwich Point, foot of Oregon avenue. Frame, 40x40 feet, concrete foundations, shingle roof.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Storage Building, southwest corner of Weecaceo and Jackson street, Philadelphia, \$2,400. Lubrico Co. (O), Meadow and Jackson streets. Brick, 1 story, 41x41 feet, stone foundations, cement floors, slag roof. George H. Evans (C), 45 North Thirteenth street.

Dwelling, 902 South Ninth street, \$400. Vincent Mazza (O), on premises. Jos. Perlucci (C), 1030 Mifflin street. Brick, 1 story, 11x10 feet, stone foundations, slag roof.

Chimney, northeast corner of Eighteenth and Lehigh avenue, \$1,400. C. H. Wheeler Manufacturing Co. (O), on premises. M. W. Kellogg Co. (C), 90 West street, New York City. Brick, 135 feet high.

Factory, southeast corner Third and Somerset streets, Philadelphia, \$800. E. F. Houghton (O), on premises. Bushnell Bros. (C), 2146 East Norris street. Brick, second story addition, 9x10 feet 8 inches, 13 feet high.

Office and Garage, northeast corner Roberts and Stockley streets. American Insulation Co. (O), on premises. Wm. Steele & Sons Co. (C), Sixteenth and Parkway. Brick, stone and concrete foundations, 2 stories, 83x24 feet, slag roof.

Coal Yard Office, 4002-20 Ridge avenue, \$1,000. C. O. Struse & Sons (O and C), on premises. Brick, 1 story, 15x25 feet, stone foundations, slag roof.

Dwelling, 7811 St. Martins Lane, \$520. H.

H. Hoosten Estate (O), on premises. James Spear Co. (C), 1823 Market street. New heater.

Machine Shop, "F" and Atlantic streets, \$6,000. F. K. Pierson, Jr. (O), 726 East Allegheny avenue. S. J. Kennedy (C), 3105 F street. Brick, 1 story, 50x136 feet, stone foundations, slag roof.

Ice Storage Building, 4160 Wayne avenue, \$9,000. Midvale Ice Manufacturing Co. (O), Wayne avenue. E. R. Hall (C), 34 South Seventeenth street. Brick, 1 story, 52x82 feet.

Factory, southwest corner of Third and Somerset streets, \$500. E. F. Houghton & Co. (O), Third and Somerset streets. Bushnell Bros. (C), 2146 East Norris street. Brick, 30 feet high, 5 feet 3 inches in diameter.

Boiler House, Fifty-second and Media sts., \$5000. Chambers Bros. Co. (O and), Fifty-second and Media streets. Brick walls and new boiler.

Church, Forty-second and Wallnee streets. Trustees Mt. Olivet Baptist Church (O), Thirty-seventh and Powelton avenue. J. F. Trent (C), 2041 Master street. Foundations only.

Boiler House, northeast corner of Howard and Norris streets, \$5,000. Superior Thread and Yarn Co. (O), Howard and Norris streets. Wm. Steele & Sons Co. (C), Sixteenth and Parkway. Brick, stone foundations, 1 story, 22x36 feet, wood roof.

Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

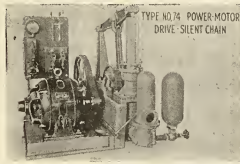
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Commercial Trust Building PHILADELPHIA

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You Expect

HARRIS J. LATTI

Pennsylvania Building, Phila.

Storage, 6207 West Girard avenue, \$300. Harry Miller (O and C), 6207 West Girard avenue. Brick, 1 story, 19½x25 feet, slag roof.

Office, 1131 South Eighth street, \$500. Jos. Gavin (O and C), 1430 South Fifteenth st. Brick, 1 story, 15x12 feet, stone foundations.

Garage, Bustleton and Byberry Road, \$400. J. Taylor (O), Jameson, Bucks County, Pa. W. D. Babick (C), Somerton, Pa. Frame, 1 story, 20x22 feet, concrete foundations, cement floor.

Storage, 2527 East York street, \$2,200. A. Rosen & Son (O), 1748 Frankford avenue. Harry Rosen (C), 1748 Frankford avenue. Brick addition, 1 story, 44x78 feet, slag roof.

Restaurant, 5138-40 Market street, \$1,000. Wm. Lee Yorke (O and C), 5140 Market st. Brick, 1 story, 20x18 feet.

Factory, Fourth and Federal streets, \$360. Southwark Foundry Co. (O), Fourth and Washington avenue. H. W. Goshwind (C), 761 North Twenty-sixth street. Concrete.

School, Hutchinson street, south of Locust street. J. Stinge Mission (O), on premises. H. W. Goshwind (C), 761 North Twenty-sixth street. Reinforced concrete, fire towers and additional work.

Storage Building, Twenty-first and Market streets, \$7,000. Gimbel Bros. (O), Ninth and Market streets. Charles Gilpin (C), Harrison Building. Repair fire damages to roof of old store building, walls standing.

Store, Tineum avenue, west of Eighty-eighth street, \$300. W. J. Prettyman (O and C), 8718 Laycock avenue. Iron on iron, 1 story, 20x14 feet.

Garage, 6400 Woodbine avenue, \$1,300. Max Sherritt (O), 6400 Woodbine avenue. Milton W. Young (C), 2021 Upland Way. Brick, 22x10 feet, slag roof, cement floor.

Tenement House, 1923 Naudain street, \$500. Octavia Hill Association (O and C), 613 Lombard street. Brick alterations.

Store, 2350 North Front street, \$3,000. L. K. Liggett, Lessee (O), Philadelphia. Wm. Kiehle Co. (C), 4933 North Fifth street. Brick, interior alterations.

Store Building, 1726-28 Ludlow street, \$10,000. F. P. Mellon Estate (O), Middle City Building. Geo. C. Dougherty (C), 1725 Ludlow street. Brick, 1 story, 32x75 feet, stone foundations, slag roof.

Dwelling, 609 Hoffman street, \$500. Nathan Litman (O and C), 2030 South Fifth street. Brick, exterior and interior alterations.

Store and Dwelling, 5162 Viola street, \$1,000. Jacob Grassman (O), on premises. Nathan Litman (C), 2030 South Fifth street. Brick, 1 story, 14x9 feet, stone foundations, general alterations.

Shop, 1509-11 Perth street, \$500. B. Bornstein (O and C), 1510 North Franklin street. Brick, 1 story, 34x28 feet.

Store, 3937 Germantown avenue, \$300. Ott & Son (O), 3520 Germantown avenue. I. A. Dunkelberger (C), 71 East Herman street. Interior alterations.

Garage, 4683 Adams street, \$400. H. H. Walton (O), 4683 Adams street. Asbestos Crete Building Co. (C), 1927 Market street. Iron, 1 story, 10x18 feet.

Apartment, 216 North Thirty-third street, \$975. W. W. Lee & Son (O), 45 Walnut street. Brownworth Co. (C), 1611 Sansom street. Iron fire escape, including fireproof.

Dwelling, 1012 Cross street, \$425. Joseph Caruso (O), 1012 Cross street. John Didati (C), 840 Mountain street. Rear shed, brick, 11½x9½ feet.

Store, 344-46 South street, \$500. J. F. Garity (O and C), 758 South Juniper street. Fire repairs, new roof and plastering, brick work.

Store and Dwelling, northwest corner of Twentieth and Snyder avenue, \$900. J. J. Sommers (O), on premises. Smith-Hardien Co. (C), 1606 Cherry street. New doorway, new window, stairway, brick.

Shed, Wissahickon and Juniata streets, \$4,500. American Pulley Co. (O), on premises. R. H. Bowen (C), 221 West Horter street. Shed, iron, 113x92 feet and 40x12 feet.

Shed, Wissahickon and Juniata streets, \$1,500. American Pulley Co. (O), on premises. R. H. Bowen (C), 221 Horter street. Iron, 30x29x12 feet.

Oil Storage House, Tulip and Somerset sts., \$36,000. Philadelphia and Reading R. R. Co. (O), Twelfth and Market streets. Pringle Borthwick (C), 8018 Germantown avenue. Fireproof, reinforced concrete and brick, 1 story, 42x49 feet, asbestos roof, plumbing, heating, electric lighting, electric elevator.

Master Mechanic's Office, Tulip and Somerset streets, \$10,000. Philadelphia and Reading R. R. Co. (O), Twelfth and Market streets. Pringle Borthwick (C), 8018 Germantown avenue. Brick, concrete and wood, 17½x27½x22 feet, 1 story and basement, wood, stairways and stairs of brick and concrete, fireproof, asbestos roof, electric lighting, plumbing and heating.

Dwelling, 147 North Fifth street, \$825. Aug.

Abramson (O), 847 North Fifth street. Wm. T. Kleinfelder, Jr. (C), 819 North Fifth street. Hot water heating system.

Store and Dwelling, Eighth and Diamond streets. Martin I. Isen (O and C), on premises. New flush bulk, changing stairway, brick work.

Carpenter Shop, 809 Filbert street, \$1,800. Strawbridge & Clothier (O), Eighth and Market streets. C. Smith (C), 827 Filbert street, Philadelphia. Brick, 2 stories, 53x32 feet, slag roof.

Garage, 5520-22 Yeom street, \$315. W. Simpson (O), 919 South Forty-sixth street. M. W. Richey (C), 5005 Pentridge street. Brick, 1 story, 10x16 feet, slag roof. Manufacturing Building, Germantown and Allegheny avenues, \$1,500. Air Reduction Co. (O), on premises. James Mitchell, Inc. (C), 76 Montgomery street, Jersey City, N. J. Brick house, 7x30 feet, concrete shed for transformers.

Store, 1017 Market street, \$8,000. The Finance Co. (O), Finance Building, Philadelphia. Ketcham & McQuade (C), 1029 Brown street. New bulk windows and entrance, tile floor, plaster ceiling on metal lath, brick work.

Fertilizer Manufacturing Building, 734 S. Swanson street, \$3,000. George Collins (O and C), 306 South Front street. Concrete foundations, brick, installing machinery, foundation work for conveyor.

Garage, 6508 North Seventh street, \$600. C. E. Lloyd, Jr. (O and C), Eighth and Sixty-sixth avenue. Stone, stone foundations, cement floors, 16x17 feet, slate roof.

Garage, Sixty-fourth avenue, west of Seventh street, \$450. C. E. Lloyd, Jr. (O and C), Eighth and Sixty-sixth avenue. Stone, 10x15 feet, cement floor.

Manufacturing Building, Tacony and Lewis streets, Philadelphia, \$25,000. William & Harvey Roland (O), on premises. Irwin & Leighton (C), 126 North Twelfth street, Philadelphia. Steel and concrete and brick, 1 story, 100x138 feet and 48x76 feet.

Workshop and Storage, Milnor, north of Bleigh street, \$7,000. Tacony Ordnance Corp. (O), on premises. Tacony Ordnance Corp. (C), on premises. Brick, 2 stories, 48x45 feet.

Garage, 2615 North Reese street, \$1,500. Hardwick & Magee (O), Seventh and Lehigh avenue. H. P. Werner (C), 3245 Germantown avenue. Brick, slag roof.

Residence, 4415 North Third street, \$1,000. Antonio Cellini (O), 4418 North Third street. Nardy Co. (C), 902 Bulletin Building. Brick addition, 2 stories, 8x16 feet, slag roof.

We have pebbles all sizes. Cost less than what you are using. DAVID
FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

Dwelling, 3928 Girard avenue, #445. Joseph Lipman (O), on premises. Louis Lipsky (O), 1504 North Franklin street. Brick, 1 story addition, 12x6 feet, stone foundations, tin roof.

Restaurant, east side of Fifteenth street, south side of Filbert street, #5,342. Pennsylvania R. R. Co. (O), Broad Street Station. F.

A. Havens Co. (C), 845 North Nineteenth street. Refrigerating facilities.

Conservatory, 1305 Oak Lane avenue, #1,200. Samuel S. Fretz, Jr. (O), 1305 Oak Lane avenue. Wm. H. Watts & Co. (O), 37 South Sixteenth street. Iron on iron, 1 story, 17x12 feet, brick work.

This estimate is faulty, because the cost of material, expense and supposed profit are lumped together instead of being separated. How much more intelligent this estimate appears when put together as it really should be:

Cost of materials (itemized).....	\$46.25
Cost of labor.....	20.00
Expense	10.00

Cost	\$76.25
Profit	3.75

Selling price\$80.00

Probably the most surprised of all in this transaction would have been the compiler of this estimate in lump summing it, to learn of the narrow margin of \$3.75.

The lump sum method shows nothing but the selling price and cannot be commended for accuracy or profitableness. It is an easy method, but deceptive, because the selling price is not analyzed into its component parts. The amounts allowed for material, labor, incidentals, overhead and profit are not shown. The price named is not developed out of an experience and accounting, but because the amount named seems to be the prevailing price. This class of estimates is used because the price has been fixed, either by competition or some other circumstance, it being assumed that the cost of performing the work would be less than the selling price. Another undesirable feature is that the one who estimates by the lump sum method does not generally keep a record of the cost of each contract and has no means of determining whether there is a gain or a loss. While the amounts of the above illustrations are small, the principle is precisely the same for estimates of any size.

The unit method is the most accurate estimating system; its value consists in detailing every unit of material and labor required. It also lessens the chance for omissions, under-estimating and other errors. It consists in taking each part of the work as a unit.

This system adapts itself very readily to nearly all lines of building work. For instance, the number of feet of conduit for electrical work, flooring, or roofing can be considered as a unit. The cost of this material and the labor of installation completing the unit makes the estimating comparatively easy and accurate. This system is more accurate in taking work from the plans, as different portions can be checked against the work shown on the drawings. Another feature in its favor is the ease with which the estimated cost and real cost can be compared. This method takes a little more time, more painstaking, more detailed work than the lump sum, but estimating is too vital a part of the business to be slighted, or lumped, because somebody is in a hurry.—“The National Builder.”

THE BUSINESS END OF BUILDING

By Edwin L. Seabrook.

(Concluded from Last Week.)

The work upon which the following estimate was made was performed on a building in Pennsylvania. The first column is the estimate in condensed form; the second column shows the contract cost:

	Estimate.	Cost.
Materials (itemized).....	\$1,119.00	\$1,094.24
Labor (productive).....	380.00	333.00
Expense, 55% Productive		
Labor	209.00	183.15
	\$1,708.00	\$1,610.39
Profit, 30%	512.00	
Bid	\$2,200.00	

Profit	\$ 609.61
Contract Price	\$2,200.00

The completed work shows a good profit, yet this was the lowest of five bids. A study of this estimate shows that every feature of the work was carefully analyzed and the computations intelligently put together. Another important feature of this transaction is that the cost of each item was kept as the work progressed. When the contract was completed the estimated and real cost could be compared. The following estimate is a striking example of the lump sum method. The selling price is the only item named, except labor, for which the time is given:

	Selling Price.
Material	\$130.00
Labor, 4½ days, man and helper..	28.80
	\$158.80

As these “lump sums” were the only data at hand, and not knowing the real cost, an offer of \$144 was accepted. The results of the completed contract were:

	Cost.
Cost of material (itemized).....	\$ 99.86
Labor	22.50
	\$122.36
Profit	21.64
Selling Price.....	\$144.00

The profit, \$21.64, is almost a delusion. The element of overhead is not included. The overhead was based on productive pay roll and the real factors were:

Cost of material.....	\$ 99.86
Cost of labor.....	22.50
Expense	11.70
Profit	9.94

Selling Price.....\$144.00

The first estimated price of \$158.80 would have allowed a substantial profit. The estimate was compiled in such a manner as to render it impossible to determine the probable cost. If the original estimate had been put up in something like this form: Material (itemized), \$99.86; Labor, \$22.50; Expense, \$11.70; Profit, \$23.94; total, \$158.00, it would have been seen at a glance that the price could not have been cut to \$144.00.

A large percentage of contractors who figure to make a profit do not make a third or a fourth of what they estimate, while many lose money on contracts without knowing it. Most of this is due to bad estimating and failure to check up the cost of each completed item with the estimate. This is particularly true of small work. Here is an example of loose estimate, lumped sum, for \$80, which was named for the selling price.

After the selling price was named the make-up worked out was:

Materials	\$51.00
Incidentals	5.50
Labor	24.00
	\$80.50

Results of Completed Contract.

Materials	\$46.25
Labor	20.00
	\$66.25
Cost	\$66.25
Profit (supposed)	13.75
	\$80.00

The expense of conducting business, or overhead, on this job was \$10, calculated on the productive labor methods, the real profit was, therefore, \$3.75.

THE LIBERTY LOAN ARMS OUR SOLDIERS.

The subscribers to the Liberty Loans have purchased for the War Department over \$4,000,000,000 of ordnance—\$1,000,000,000 was spent for artillery; \$300,000,000 for automatic rifles; \$100,000,000 for small arms; nearly \$2,000,000,000 for artillery ammunition and \$340,000,000 for small arms ammunition; \$100,000,000 was spent for armored motor cars.

It is estimated that \$7,000,000,000 will be spent by the Ordnance Department this current year.

Every American wishes to have a part in winning the war and supporting our soldiers who are fighting our battles in France. Every subscriber to the Fourth Liberty Loan will have a part in the great achievements that the American Army is accomplishing, and in the achievements which the greater American Army will accomplish next spring.

We have nearly two million men in France. Every subscriber to the Liberty Loan helped send them there.

For artillery, automatic rifles, and small arms, and for ammunition for them, we have spent over \$3,700,000,000. Every Liberty Loan subscriber helps to arm our soldiers.

We have spent over \$120,000,000 just for staple supplies for our army, such as flour, bacon, rice, etc.

Every subscriber to the Liberty Loan helps feed our soldiers.

We have spent over \$500,000,000 to clothe our soldiers.

Every subscriber to the Liberty Loan has had a part in this care of the Americans who are fighting in France.

Considerable saving may be effected through the splicing of remnants of 2x4 and 2x6 timbers, especially when these may be used for studs. The more convenient and artistic splice is obtained by aligning the remnants end to end and binding at the joints with 1x4 or 1x6. Sush union is preferable to overlapping the remnants, as the latter gives a clumsy effect. Judgment must be exercised as to when to splice, as it seldom pays to splice remnants that are too short.

Fifty years ago the grocer set out a keg of mackerel and a box of kindling wood, and sat down to wait for customers. Today he carries street-car and newspaper advertising and dresses his windows as smartly as the department store. If it didn't pay he'd still be sitting behind the stove waiting for customers with a mackerel keg out front doing service for a sign.

Statement of the Ownership, Management, Circulation, etc.

Statement of the ownership, management, circulation, etc., of The Builders' Guide, published weekly at Philadelphia, Pa., required by the Act of August 24, 1912, for October 1, 1913.

Editor, H. L. Sharpe.

Managing Editor, none.

Business Manager, none.

Publishers, Building News Publishing Co., Perry Building, Philadelphia.

Owners, Louis S. DeLone, 6419 Drexel road, Philadelphia; Samuel R. McDowell, Narberth, Pa.

Known bondholders, mortgages and other security holders holding one per cent. or more of total amount of bonds, mortgages or other securities, none.

(Signed)

Building News Publishing Co.,

Louis S. DeLone, President.

Sworn and subscribed before me this 17th day of September, 1913.

Edward J. Toole, Notary Public.

(My commission expires Jan. 21, 1921.)

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggo give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Portland Cement, Sand or Gravel by the carload. Consult DAVID FRANCE CO.,
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Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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Explosion
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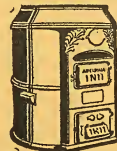
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Vol. XXXIII., No. 41
October 9, 1918

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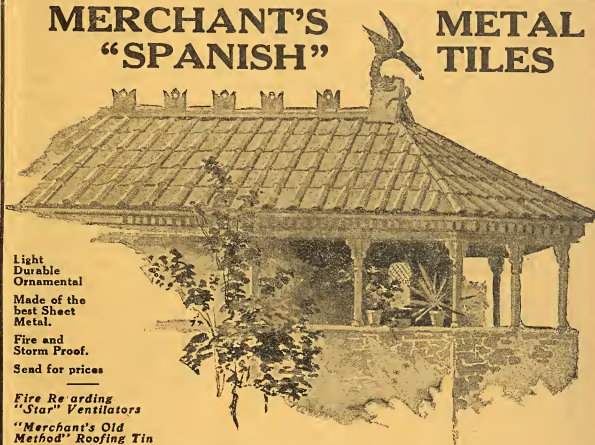


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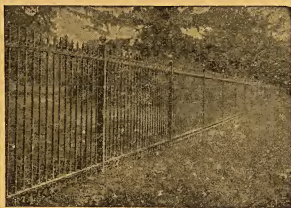
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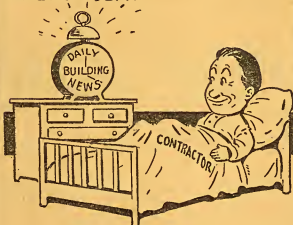
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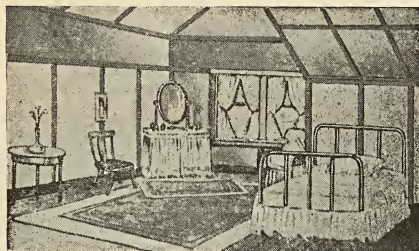
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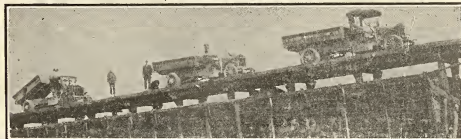
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Devoted to the Advancement of American Architecture, Structural
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VOLUME XXXIII
Number 41

PHILADELPHIA
October 9, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

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As The Editor Sees It



THE problem of Industrial Housing is still one of the great questions of the moment, and its importance, not only in its relation to the war but to the peace which will follow, cannot be too strongly emphasized. We are at last fully awake to the great part which adequate housing plays in the lives of our workers, whether war or peace.

Of course, the acute shortage of houses must be made up now, to relieve the present situation, whether the houses be temporary or permanent, and the United States Housing Corporation has received so many requests for funds to relieve the existing shortage in houses throughout the country that it has issued a special statement outlining its position in regard to local housing. The corporation urges all communities which have profited by war orders to spend some of their earnings on homes for working people; it suggests that transportation should be improved in localities where, by so doing, war workers could be housed in outlying towns. The corporation will investigate any private undertaking which purposes to provide houses for workmen within their means, either on a rental or selling basis. If such an undertaking measures up to the standards established by the national corporation, the corporation will undertake to obtain official approval for the project, and secure for it priority orders, clearance and transportation of materials, and any assistance deemed necessary for the prompt completion of the work. Any such individual undertaking must, of

course, be financed without Government aid.

In answer to its housing problem, Seattle devised a very successful scheme, which is described by Phil Norton, director of publicity, Seattle Chamber of Commerce and Commercial Club. Mr. Norton says:

"Confronting an acute housing problem, due to its pre-eminence in shipbuilding and other war work and the consequent influx of thousands of workmen, mostly married men with families, Seattle this summer again proved its efficiency in organizing by solving its housing problem without Government aid. This unique triumph is an epic in municipal progress and proof of the power of co-operation in conquering emergencies which affect the general welfare.

"First, a survey was made, showing that all available houses and apartments were occupied and that thousands more houses could be rented or sold to advantage as soon as built. Next, a building campaign was launched by the Seattle Chamber of Commerce and Commercial Club. A corporation was formed to take second mortgages, to provide free plans and expert advice on all building problems, and pressure was brought to bear through committees and publicity, to induce the owners of vacant lots to build houses upon them and thus convert tax-eating liabilities into income-producing assets. Thirty-one teams of solicitors, each composed of three business men, canvassed for pledges to build. These teams returned daily from ten to sixty

pledges, and in a few days 5,000 pledges were on file. The building operations started with characteristic vim. The campaign mark of 5,000 new houses before Christmas was assured of realization, and from that point the building will go on of its own impetus.

"Many corporations started house-building companies composed of their own officers and employees, co-operating with the More Homes Bureau of the Chamber.

"Thus, in Seattle, was the high rent menace vanquished, prosperity augmented, the public morale stiffened, facilitating in many ways the government war program. The 1910 building program will call for at least 10,000 new dwelling houses, scoring paternalistic federal aid in solving its own problems, Seattle proudly says: 'We are independent—not like a big, overgrown town that folds its arms and begs for aid.'"

* * *

ANOTHER "Plan Now" argument is offered by Stanley L. McMichael, Secretary of the Cleveland Real Estate Board. As Mr. McMichael says, his statements may well be applied to conditions following the war in any industrial city:

"Thoughtful investors in Real Estate are realizing more and more as the war continues, that there is certain to be a substantial increase in property values at the conclusion of the great conflict and they are investing in well located and properly improved homesites, according

(Continued on Page 569.)

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Residence (alts.), Mt. Airy, Philadelphia. Architects, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owner, Mrs. Frank L. Neal, 102 East Mermaid Lane, Chestnut Hill. New heating system, changing plumbing and minor interior alterations. Architects taking bids, due as soon as possible. W. John Stevens, Inc., Wynecote, Pa.; Wm. H. Eddleman & Sons, 453 Green Lane, Roxboro, and E. Tourison, 20 Westview street, are figuring.

Warehouse and Garage, 522-32 North Third street and 521-31 North Orianna street. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care of architect. Brick, slow burning construction, 1 story, 100x108 feet, slag roof, electric lighting, roof ventilators. Architect taking bids, due October 14th. Cannon Const. Co., 1737 Filbert street; F. B. Davis, 240 North Sixteenth street; Thomas Duff, Eighth and Wyoming avenue; A. L. Pretz & Son, Heed Building; Matthew King, 3714 Fairmount avenue; Ketcham & McQuade, 1029 Brown street; E. J. Kreitzburg, 1345 Arch street; D. A. McClelland, 4011 Barin street; Monaghan & Losse, Inc., 3016 Chestnut street; Raith Const. Co., 304 Master street; John R. Wiggins & Co., Otis Building, and John M. Yardley, 1716 Sansom street, are figuring.

Bridges (4), Sedgley avenue, Glenwood avenue and Ontario street, over North Penn Branch of Reading, and Evergreen avenue, over Chestnut Hill Branch of Reading. Architect, private plans. Owners, City of Philadelphia, Bridge Division, Department of Public Highways, care of George E. Datesman, Director, City Hall, Philadelphia. Cleaning, painting and new wooden decks. Owners are taking bids.

Shed, Clearfield between Nineteenth and Twentieth streets, \$2,500. Architect, private plans. Owners, Standard Press Steel Co., on premises. Iron on iron, 40x48 feet, open shed. Owner will build.

Mess Hall, Thirty-sixth and Locust streets to Woodland avenue. Architects, Zantzing, Borie & Medary, Otis Building, Philadelphia. Owners, U. S. Government, War Department, Washington, D. C. Frame, 2 stories, 149x301 and 212 feet, ready roofing, steam heating, electric lighting, metal lath, cement floors. Architects have received bids.

Forge Shop (add.), Frankford Arsenal, Philadelphia, \$100,000. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Brick, steel and concrete. Plans in progress.

Officers' Quarters, Frankford Arsenal, Phila-

delphia. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Brick, steel and concrete. Plans in progress. Plans will be completed in about one month.

Experimental Building, Frankford Arsenal, Philadelphia, \$400,000. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Brick, steel and concrete. Plans in progress. Owners will be ready for bids in about three weeks.

Case Shop, Frankford Arsenal, Philadelphia, \$250,000. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Brick, steel and concrete. Plans nearing completion. Bids will be taken shortly.

Store (alts.), 40 South Fifty-second street, Philadelphia. Architect, Henry L. Reinhold, 1309 Walnut street, Philadelphia. Owners, Louis & Julius Winkelman, 38 South Fifty-second street, Philadelphia. Metal bulks, tile and marble work, iron work. Architect taking bids, due as soon as possible. John M. Yardley, 1716 Sansom street, and Basch & Co., 1610 South Front street, are figuring.

Office, Locker, Wash Room and Toilet Addition of Blacksmith Shop, Cramp's Shipyard,

Philadelphia, \$3,000. Architect, private plans. Owners, Wm. Cramp & Sons S. and E. Building Co., Norris and Richmond streets. Miscellaneous alterations and repairs. Owners taking bids. F. A. Havens & Co., 845 North Nineteenth street, are figuring.

Lumber Storage Shed and Stable, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Steel, reinforced concrete, brick, terra cotta coping, granite, 1½ stories, 100x150 feet, 2½ stories, 65x36 feet, slate, slag and cement tile roof, cement, maple and wood block floors, hollow tile, metal lath, electric elevators, carborundum treads, roof ventilators, concrete foundations, rolled steel sash and skylights, fire doors, kalamein doors and trim, steel plate and steel doors, wire work. Owners taking bids, due October 14th. Wm. R. Dougherty, 1610 Sansom street; John M. Yardley, 1716 Sansom street; W. W. Anstine Co., 1218 Filbert street; Wm. Steele & Sons Co., Sixteenth and Parkway; Wark & Co., 1737 Filbert street; Ketcham & McQuade, 1029 Brown street; F. W. Mark Const. Co., Finance Building, and Monaghan & Losse, Inc., 3016 Chestnut street, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Building (alts. and add.), Broad and Tasker streets. Architects, A. J. Sauer & Co. and H. Lewis Shay, 130 South Fifteenth street, Philadelphia. Owner, H. T. Reynolds, 1343 South Tenth street. Brick and stone, cement work, tin and slag roof, hardwood floors, metal lath, steam heat, electric light, tile and marble work. Contract awarded to Stewart Bros., 2526 North Orkney street.

Emergency Hospital Buildings, Spec. 3297, Gray's Ferry Road, Philadelphia, \$427,441. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Hospital corps barracks (2), 2 stories, 118x164 feet; Nurses' Quarters, 3 stories and basement, 192x65 feet; Subsistence Building, 1 story, 142x45 feet and 34x79 feet; Boiler House and Laundry, 2 stories and mezzanine floor, 67x48 feet; Wards (8), 2 stories, 115x190 feet; Observation Ward, 2 stories, 39x190 feet; Officers' Ward Building, 2 stories, 107x34 feet; Shed, 1 story, 80x30 feet, frame, hollow tile, brick, concrete foundations, ready and slag roof, composition and cement floors, metal lath, ventilators, fireproof and tin-clad doors, kalamein doors, steam heating, electric wiring. Contract awarded to

Melody & Keating, 1322 Race street, Philadelphia.

Convent (alts.), 2028 Girard avenue, Philadelphia, \$4,400. Architect, Paul A. Monaghan, Drexel Building, Philadelphia. Owners, Nuns of the St. Clare, Chapel of Our Lady of Peace. Brick work, partitions, 4 stories, fire tower, stone and cement, 8x9 feet, and general interior alterations. Contract awarded to James McCann, 1704 Poplar street, Philadelphia.

Pump House, Snyder avenue and Water street, \$2,500. Architect, private plans. Owners, Publicker & Ward, on premises. Brick, 1 story, 11x14 feet, slag roof, stone foundations. Contract awarded to Joseph Levin, 1530 South Sixth street, Philadelphia.

Shed (add.), Thirty-sixth and Gray's Ferry Road, \$1,900. Architect, H. P. Friend, Arcade Building, Norristown, Pa. Owners, D. B. Martin Co., on premises. Brick, 1 story, 24x55 feet, slag roof. Contract awarded to H. P. Friend, Inc., Norristown, Pa.

Store (alts.), 101 Market street, Philadelphia, \$3,700. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Mastbaum Bros. & Fleisher, 1424 South Penn Square. Interior alterations, plastering, decorating, electric work, tile and marble work, metal bulks,

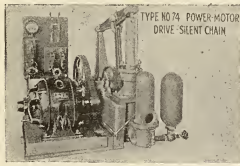
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tile work. Contract awarded to Smith-Hardican Co., 1606 Cherry street, Philadelphia.

Garage, Bensalem Pike and Bustleton Pike, \$1,800. Owner, J. B. Miller, Bustleton, Philadelphia. Stone foundations, frame, 1 story, 28x40 feet, slag roof. Contract awarded to C. H. Weiss, 9512 Bustleton Pike.**Clothing Issue Building**, Training Camp, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Paymaster E. H. Cope, Navy Yard, Philadelphia. Frame, 1 story, 42x90 feet, ready roofing, wood floors, roof ventilators. Contract awarded to Thomas C. Trafford, 1613 Sansom street, \$12,850; time, 75 days.**PENNSYLVANIA
Construction News****Apartment Houses, Stores, Moving Picture Theatre, Engine House and Garage**, Bethlehem, Pa. Architects, Zantinger, Borie & McDary, Otis Building, Philadelphia. Owners, U. S. Government, Department of Labor, Bureau of Industrial Housing and Transportation, Washington, D. C. Engineer, L. J. H. Grosart, Bethlehem, Pa. Town Planner, Thos. W. Sears, 1424 Walnut street, Philadelphia. Brick, concrete, various sizes and styles, slate, composition or slag roof, cement and hemlock floors, electric lighting, hot air heating. Owners are ready for bids.**Residences (1,000)**, Chester, Pa. Architect, private plans. Owners, North Chester Realty Co. and U. S. Shipping Board, Emergency Fleet Corp., 252 North Broad street, Philadelphia. Brick and hollow tile and stucco, 2 stories, 15 feet and 16x30 feet, ready roofing, stone foundations, hot air heating, electric lighting, yellow pine floors. Plans for 290 completed and owners are ready for bids. Plans for balance in progress.**Pump House**, Port Mifflin, Pa., Spec. 3482. Architect, private plans. Owners, U. S. Government, care of Supply Officer, Navy Yard, Philadelphia. Brick, 1 story, 21½x27½ feet, asbestos shingle roof, cement floors, concrete foundations (heating and electrical lighting reserved). Owners taking bids, due October 14th, at 10 A. M. J. S. Rogers Co., Drexel Building; Lam Building Co., 1001 Wood st.;

T. C. Trafford, 1613 Sansom street; H. H. Wehmeyer, 509 West Cumberland street, Philadelphia, are figuring.

**Pennsylvania
Contracts Awarded****Manufacturing Building**, Marcus Hook, Pa. Architect, private plans. Owners, National Aniline and Chemical Co., Marcus Hook, Pa. Brick, steel and concrete, 1 story, 33x97 feet, tile roof, cement floors, rolled steel sash, rolled steel skylights, fire doors. Contract awarded to F. W. Van Loon, Denckla Building, Philadelphia.**Machine Shop**, Enola, Pa., \$65,000. Architect, Wm. A. Cookman, Broad Street Station, Philadelphia. Owners, Pennsylvania R. R. Co., care of A. C. Shand, Broad Street Station. Steel and brick, 1 story, 70x160 feet, slag roof, wood floors, electric lighting. Contract awarded to Irwin & Leighton, 126 North Twelfth street, Philadelphia.

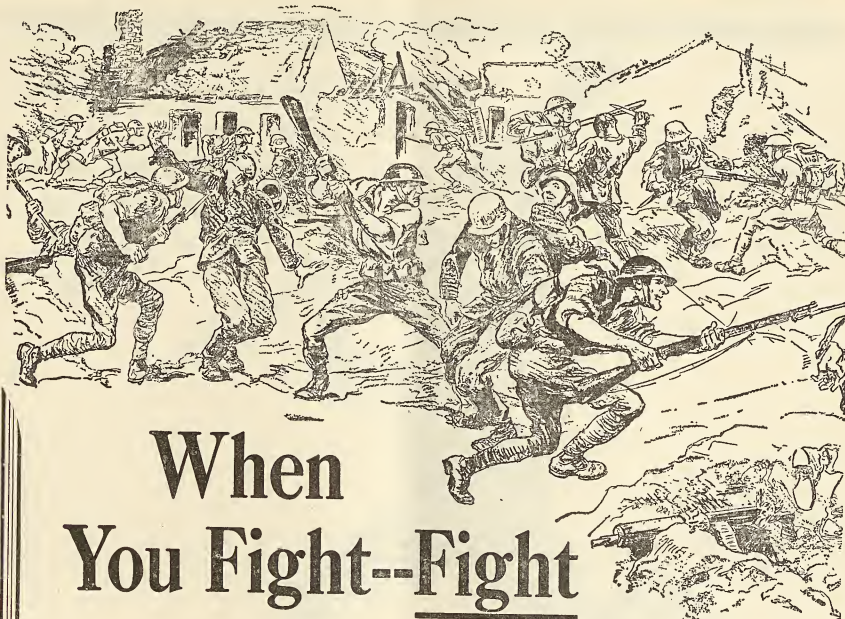
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**New Jersey
Construction News****Office Building and Machine Shop**, Blenheim, N. J. Architect, H. Lewis Shay, 130 South Fifteenth street, Philadelphia. Owners, Simplex Valve and Meter Co., Blenheim, N. J. Steel, cement blocks and granite, 2 stories, 74 feet 8 inches x42 feet, 150x42 feet, J-M asbestos roof, cement and yellow pine floors, metal lath, rolled steel sash and skylights, concrete foundations, steam heating, roof ventilators, dampproofing (electric lighting reserved). Architect taking bids. F. G. Stewart, 1619 Sansom street, is figuring.**Hotel**, Atlantic City, N. J., \$1,500,000. Architect, Frederick Webber, Morris Building, Philadelphia. Owners, Brighton Realty Co., care of architect. Brick, steel and concrete, 12 stories, 180x200 feet, concrete and slag roof, concrete, oak and Mackite floors, electric lighting, tile, marble and terrazzo floors, kalamain doors, metal lath, carborundum stairs, metal weather strips, waterproofing. Architect taking bids. Standard Const. Co., 1713 Sansom street, Philadelphia, is figuring.**Power House**, Spec. 3406, Cape May, N. J., \$38,210. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks. Brick and reinforced concrete, 1 story, 98 feet 9 inches x48 feet 3 inches, concrete and pile foundations, concrete and built-up roof, concrete, brick and mastic floors, hollow tile, electric lighting, steel doors, steel stack. Contract awarded to Cramp & Co., Denckla Building, Philadelphia.**Barracks for Federal Armed Guards**, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Frame, 2 stories, 196x40 feet, ready roofing, concrete foundations, steam heating, electric lighting, wood floors, copper wire screens. Owners taking bids, due as soon as possible. Stacy Reeves & Son, 2011 Market street; Doyle & Co., 1519 Sansom street; J. S. Rogers Co., Drexel Building; Irwin & Leighton, 126 North Twelfth street, Philadelphia, and Fraser Brace Co., 1328 Broadway, New York City, are figuring.**SCALES
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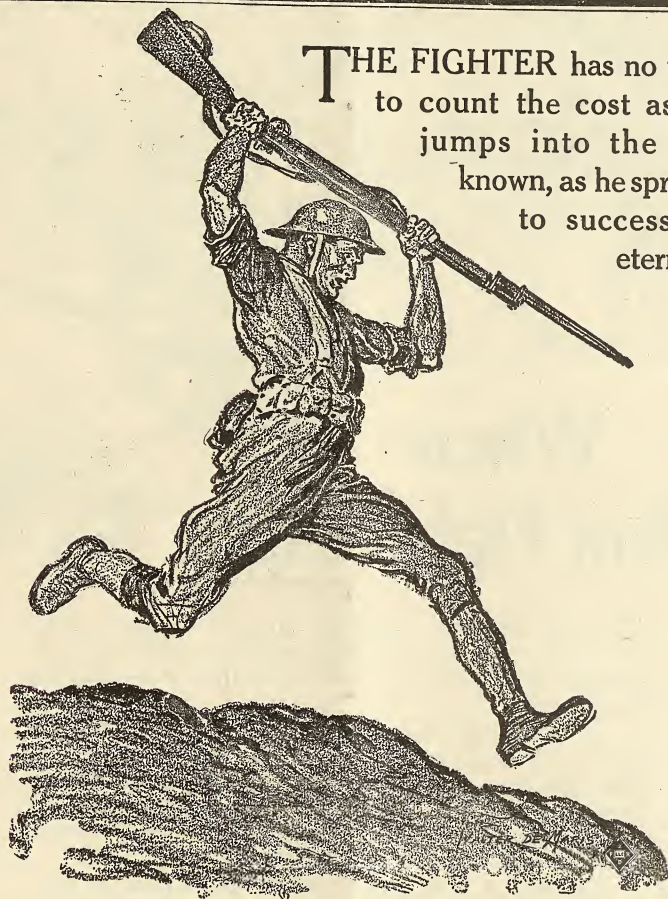
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They are intent on one thing—to scale that bank, take the bridge head and *win the day*.

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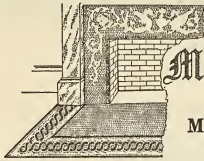
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on premises. Brick, 1 story, slag roof, electric lighting. Contract awarded to Fred W. Felte, 319 South Pulaski street, Baltimore.

Houses (60), Aberdeen, Md. Architects, Sill, Buckler & Febhagen, 11 East Pleasant street, Baltimore, Md. Owners, U. S. Government, Housing Commission of Department of Labor, care of O. M. Edlitz, Chief, 613 G street, Washington, D. C. Frame, 2½ stories, slate roof, hot air or hot water heating, electric lighting. Contract awarded to Sutton & Carson, Ocean City, N. J.

Shops, 512 South Chester street, Baltimore, Md., \$3,500. Architect, C. S. Austin, 2912 Guilford avenue, Baltimore, Md. Owners, Isaac A. Sheppard & Co., on premises. Brick, 1 story, 27x30 feet and 36x45 feet, Carey roof, concrete floors. Contract awarded to Henry S. Franklin, 5 South Linwood avenue, Baltimore, Md.

Shop, Elk and Wicomico streets, Baltimore, Md., \$40,000. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore, Md. Owners, Bartlett Hayward Co., Scott and McHenry streets, Baltimore. Concrete foundations, frame, 1 story, 100x400 feet, slag roof, steam heating, electric lighting. Contract awarded to Morrow Bros., Fidelity Building, Baltimore, Md.

Tool House, Columbia avenue and Putnam streets, Baltimore, Md., \$24,250. Architects, Parker, Thomas & Rice, Union Trust Building, Baltimore, Md. Owners, Bartlett Hayward Co., Scott and McHenry streets, Baltimore. Concrete foundation, frame, 1 story, 100x105 feet, slag roof, electric lighting. Contract awarded to Morrow Bros., Fidelity Building, Baltimore, Md.

Miscellaneous Construction News

Hospital (alts.), Milford, Del. Architects, Brookie & Hastings, 1719 Sanson street, Philadelphia. Owners, Milford Emergency Hospital, Milford, Del. Changing three residences into hospital building, new partitions, lath and plaster, changing doors and windows, hot water heating, electric lighting, oak floors. Owners are taking sub-bids.

Building "F" and Nurses' Quarters, Spec. 3371, Brooklyn, N. Y. Architect, private

plans. Owners, U. S. Government, care of C. W. Parks, Chief, 613 G street, N. W., Washington, D. C. Brick and reinforced concrete, 4 stories, 156x275 feet and 3 stories, 156x276 feet, composition roof, concrete and composition floors, hollow tile, electric lighting, tile and marble work, rolled steel sash, galvanized steel skylights, tin-clad and kalamein doors, iron stairs. Contract awarded to White Fireproof Const. Co., 286 Fifth avenue, New York City, #668,212.

MARYLAND Construction News

Steel Plant Building, Sparrows Point, Md. Architect, private plans. Owners, Bethlehem Steel Co., South Bethlehem, Pa. Brick, steel and concrete, 2 and 3 stories, 1150x272 feet, concrete and slag roof, electric lighting, elevators, steel sash, metal doors, hollow metal skylights, ventilators, fireproofing, dampproofing, hollow tile, metal lath, composition floors, plumbing, ornamental iron work. Owners are taking bids, due as soon as possible. Deverell-Spencer Co., Garrett Building, Baltimore, Md., are figuring.

Dwelling, Montbello Park, Baltimore, Md., \$3,500. Architect, George Wessells, Baltimore, Md. Owners, Montbello Park Co., Harford Road, Montbello, Baltimore, Md. Frame, 2½ stories, slate roof, steam heating, electric lighting, plumbing, painting, plastering. Owners are taking sub-bids.

Warehouse, Pier No. 5, Pratt street and West Falls avenue, Baltimore, Md. Architect, private plans. Owners, U. S. Government, War Department, Lieut.-Col. Miller, Depot, Quartermaster, Coca-Cola Building, Baltimore. Plans in progress. Too early for details.

Residence (alts.) and Garage, near St. Michael's, Talbot Co., Md. Architect, private plans. Owner, D. R. Millard, South and Baltimore streets, Baltimore, Md. Interior alterations, steam heating; Garage, frame, 1 story, shingle roof. Owner will take sub-bids.

Dwelling, Harford Road and Park View Terrace, Baltimore, Md., \$6,000. Architect, Geo. Wessells, Baltimore, Md. Owners, Montbello Park Co., Harford avenue, Baltimore. Frame, 2½ stories, slate roof, steam heating, electric lighting, plastering, plumbing, painting. Owners are taking sub-bids.

Store (alts.), 215 North Calvert street, Baltimore, Md. Architect, Francis E. Tormey, 822 Newington avenue, Baltimore, Md. Owner, Edwin J. Farber, Calvert Building, Baltimore, Md. Metal bulk, mill work, steam heating, electric lighting, concrete work, plastering, tile and terrazzo work, painting, plumbing. Contract awarded to P. C. Street, 3408 Norwood avenue, Baltimore, Md.

Auditorium, Baltimore, Md. Architect, private plans. Owners, Camp Welfare League, Baltimore, Md. Frame, 1 story, 250x500 feet, steam heating, electric lighting. Contract awarded to Price Const. Co., Maryland Trust Building, Baltimore.

Garage, 2103 Frederick avenue, Baltimore, Md. Architect, Frederick J. Beall, 1335 North Gilmer street, Baltimore. Owner, Otto Obst,

Alterations and Additions

Dwelling, Master and Marston streets, Philadelphia, \$600. Catherine Neystert (O), 2722 Master street, Philadelphia. Geo. Merkel (O), 1411 Spark street, Philadelphia. Brick and stone, 1 story, 12x12 feet, stone foundations, slag roof.

Warehouse, Ninth and Poplar streets, Philadelphia, \$35,000. Keystone Supply and Manufacturing Co. (O), 813 North Ninth street, Philadelphia. Smith-Hardican Co. (O), 1606 Cherry street, Philadelphia. Iron, 1 story, 114x100 feet.

Store, 101 Market street, Philadelphia, \$3,400. Mastbaum Bros. & Fleisher (O), Finance Building, Philadelphia. Smith-Hardican Co. (O), 1606 Cherry street, Philadelphia. Alterations to windows.

Manufacturing Building, Roberts and Stokeley street, Philadelphia, \$50,000. American Insulation Co. (O), on premises. Wm. Steele & Sons Co. (O), 1600 Arch street, Philadelphia. Reinforced concrete, 2 stories, 83x145 feet.

Garage, Bensalem and Bustleton Pike, Philadelphia, \$1,800. J. B. Miller (O), Bustleton Pike, Pa. C. H. Weiss (O), 9512 Bustleton Pike, Philadelphia. Frame, 1 story, 28x40 feet, stone foundations.

Shed, 3050-52 Ladlow street, Philadelphia, \$1,000. Croft & Allen (O), Thirtieth and Mar-

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ket streets, Philadelphia. Harry R. Rust (C), 19 South Eighth street, Philadelphia. Alterations, 1 story, 26x32 feet, 1 story, stone foundations.

Store, 118 Market street, Philadelphia, \$300. Pennsylvania R. R. Co. (O), Broad Street Station, Philadelphia. Staines Bros. (C), 24 N. Fifty-first street, Philadelphia. Brick, alterations.

Dye House, Allegheny avenue and Hancock streets, Philadelphia, \$1,900. J. R. Keim Co. (O), on premises. R. E. Lamb Co. (C), 843 North Nineteenth street, Philadelphia. Alterations.

Dwelling, 1508 Poplar street, Philadelphia, \$500. Central Building and Loan Association (C), 116 South Fifteenth street, Philadelphia. C. J. Williams (C), 2340 North Thirty-second street, Philadelphia. Hot water heating apparatus.

Wagon Shed, Thirty-sixth and Gray's Ferry Road, Philadelphia, \$999. D. B. Martin Co. (O), on premises. H. F. Friend Co., Inc. (C), Norristown, Pa. Brick, 1 story, 24x55 feet.

Dwelling, 1017 Vine street, Philadelphia, \$2,200. I. Ludziner (O), 1015 Vine street, Philadelphia. D. Iere (C), 318 Christian st., Philadelphia. Brick, 1 story, 20x44 feet, stone foundations, slag roof.

Rooming House, 312 South Tenth street, Philadelphia, \$560. E. Spencer (O), 312 S. Twelfth street, Philadelphia. E. F. Suplec (C), 3438 Filbert street, Philadelphia. Second and third story, brick, 11x8 feet, tin roof.

Convent, 2028 Girard avenue, Philadelphia, \$4,400. The Poor Clares (O), 1904 Girard avenue, Philadelphia. James McCann (C), 1704 Poplar street, Philadelphia. Brick, partitions, 4 stories, stone and cement foundations, 8x9 feet, interior alterations.

Workshop, Nichols and Natrona street. S. Shostack (O and C), 3220 Columbia avenue. Brick, 1 story, 16x19 feet, stone foundations, slag roof.

Garage, 5908 Latona street, Philadelphia, \$800. M. Picuelo (O), on premises. N. Morino (C), 6215 Race street, Philadelphia. Stone, 1 story, 16x22 feet, stone foundations.

Manufacturing Building, 1231 Cherry street, Philadelphia, \$1,200. John L. Donovan (O), 500 Market street, Philadelphia. D. L. Douglass (C), 217 North Sixth street, Philadelphia. Brick, repair fire damages.

Pump House, Snyder avenue and Water street, Philadelphia, \$2,500. Publiker & Ward (O), on premises. Joseph Levin (C), 1530 South Sixth street, Philadelphia. Brick, 1 story, 11x14 feet, stone foundations, slag roof.

Store, 44 North Eighth street, Philadelphia, \$1,400. H. Rosman (O), on premises. Basch & Co. (C), 1436 South Front street, Philadelphia. Flush bulks and alterations.

Dwelling, 128 North Tenth street, Philadelphia, \$900. Penn Fire Insurance Co. (O), 508 Walnut street, Philadelphia. Nathan Bassett (C), 609 Cherry street, Philadelphia. Brick, repair fire damages.

Garage, 2124-26 Wallace street, Philadelphia, \$2,000. Tanner & Jackson (O), 530 N. Nineteenth street, Philadelphia. S. J. Rea

& Son (C), 1600 Fairmount avenue, Philadelphia. Brick, alterations.

Offices, Robinson and Haverford avenue, Philadelphia, \$300. Cave Ice Manufacturing Co. (O and C), on premises. Brick, 1 story, 15x20 feet, wood floors, stone foundations, slag roof.

Dwelling, 449 Queen street, Philadelphia, \$300. Miss Rachael Kirkpatrick (O), on premises. Fred Elvidge & Sons (C), 5522 Germantown avenue, Philadelphia. Brick, 1 story, 5x12 feet, stone foundations.

Store and Dwelling, 720 South street, Philadelphia, \$1,400. J. Fingold (O), on premises. J. Gorchow (C), 4116 Girard avenue, Philadelphia. Brick, alterations.

Storage Building, 1021 North Front street, Philadelphia, \$600. National Galvanizing Co. (O), on premises. J. D. Fisher (C), 5424 Thompson street, Philadelphia. Shed, 20x50 feet, slag roof.

Shed, Clearfield, between Nineteenth and Twentieth streets, Philadelphia, \$2,500. Standard Press Steel Co. (O and C), Twentieth and Clearfield streets, Philadelphia. Iron on iron, 1 story, 40x48 feet.

Store and Dwelling, 1431 Point Breeze avenue, Philadelphia, \$600. S. Ash (O), on premises. W. T. Rentishler & Bro. (C), 1631 Girard avenue, Philadelphia. Hot water heating system.

Factory, Fourth and Appletree streets, Philadelphia, \$500. J. Ketterlinus (O), Fourth and Arch streets, Philadelphia. Steel & Uribe (C), 533 North Thirteenth street, Philadelphia. Tank supports.

Store and Dwelling, Fifty-seventh and Vine streets, Philadelphia, \$400. Harry King (O and C), on premises. Brick, alterations.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

Don't crowd your space, Mr. Advertiser. Better play up one selling point at a time than to try to get everything into one ad. and kill every possible chance for display. An ad. should stand out. It should be easily read. It should draw the attention of the reader. A carload of detail can't be crowded into a few inches of space and still retain the quality of sticking out as all good advertising should.

AS THE EDITOR SEES IT.

(Continued from Page 559.)

to reports from the various Real Estate development companies in this city.

"It has been the history of every great war that a short time after peace has been concluded there has been great activity in Real Estate circles. Present conditions tend to a damming up of all excess building.

"Hundreds of Clevelanders are ready and anxious to proceed with the erection of new homes, but, owing to the high building costs and the scarcity of labor, they do not deem it wise to proceed at this time.

"Thousands of other Clevelanders have their minds set on a similar course. Many have money to invest because they are making higher wages at the present time than ever before. To such people, I would strongly advise buying their home-sites now and make every preparation towards proceeding with their home building as soon as conditions will warrant.

"When peace comes again there is certain to be a wild rush to the offices of architectsc for house plans. Architects will be so busy that they can not meet the demands made upon them and further delay will ensue. At the present time architects for the most part are in position to handle all commissions assigned them, and take care of them in a way befitting their importance.

It seems to be the logical thing, therefore, for the prospective home owner to acquire his homesite now, and to proceed with the making of plans for the new residence he hopes to occupy several years hence. Then, when the war ends, and labor and material become available, there need be no delay in building and hundreds who now are occupying rented quarters may become their own landlords and throw off the rent shackles.

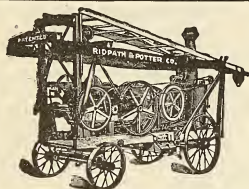
"The home owning instinct is one of the strongest. There is not a man or woman who aspires to bring up a family under proper conditions who is not eager to own a home. It is a natural instinct as that shown by the birds in building their nests.

"With the horrors and devastation of war passed by, the desire for home ownership is certain to manifest itself in thousands of instances, and there will be

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a building boom in Cleveland and similar industrial cities such as has never been witnessed before.

"Cleveland now is said to be in need of thousands of additional houses. Families are living two and three to a house which was originally intended for one.

This cannot continue indefinitely, and as good times permit these families will be eagerly seeking to own their own homes.

"It is certainly the part of wisdom to buy a home-site now, to plan the future dwelling and to be prepared to build it immediately after peace is declared."

HOMES FOR WARTIME WORKERS

By Alfred C. Bossom.

The very high plane established by the United States Shipping Board, Emergency Fleet Corporations, Housing Department, entitles the members to the enduring gratitude of workers and of the entire architectural profession.

This work might have been handled in a way that would have been a detriment to the entire future of housing in America; but the amount of study and hard gauge attitude that they have maintained in the face of the driving goal of speed, results have developed fresh views and modified old one for those of us who have made a detailed study of this subject extending over many years.

The Government's reason for undertaking housing work is, first, to aid in winning the war, which is to be accomplished by providing for workers homes where they either did not exist at all or only in insufficient quantities; and, secondly, to make these workers happy and contented, and thus increase their efficiency to the very utmost by eliminating the disconcerting influences of unsatisfactory living conditions.

This freedom from worry is of vast importance, for the actual number of available workers to-day is many millions less than when the war started, due to the enlargement of the army and navy, the returning of foreigners to their native lands and lack of immigration.

This, therefore, means that, to maintain the standard necessary to enable the war to be carried forward with the utmost despatch and success, each member of this vast army behind the army must be trained and cared for as workers have never been cared for before.

In endeavoring to produce this physical and mental attitude among the workers, the requirements of to-morrow must not be entirely lost sight of, for either the Government or some delegated authority will have to maintain these homes or dispose of them after the war, which will not last forever.

Each undertaking must be judged on its merits to determine how much of the work shall be temporary and how much permanent; and when a satisfactory decision on this point is arrived at, the problem is as to what form the permanent housing shall take.

In this article no effort will be made to deal with the various forms of temporary accommodation, but only with that proposed for permanent improvement.

Twenty years ago the author was in the Architectural Department of the London County Council, Housing Section, where we were designing and building homes for the workers, and the general type of the improvement in those days in suburban locations was of the one and the two-family houses and of

a form quite similar to the majority of those being built in this country to-day.

If a thorough examination be made of the large improvements that have been effected in England since the war started, under conditions similar to those that are now being undertaken over here, it is practically impossible to find an individual or even a two-family house. The great Well Hall development at Woolwich (the great naval ordnance works, etc., on the Thames) has not a single one-family house shown in the plans. The entire project consists of houses, or apartments, if you wish to call them, grouped in irregular combinations.

Thus they have reduced the proposition to very much of an intensive housing type on certain plots with many large open spaces in close proximity. The average land value of a housing improvement, here in the United States, varies as a rule from five per cent. of the cost of the entire improvement, and therefore the land, as such, does not cut such a great figure, as it is very often given credit for, so much so, for by a judicious arrangement of the housing units double the area of land could be used and still make the total expenditure upon the entire project less than if using some different arrangement.

For the sake of clearness, the term "housing unit" here used signifies a habitation for one family, consisting of 4, or 5, or 6 rooms, as the case may be, complete with bathroom, kitchen, etc., and for the sake of comparison of the different methods of housing, a typical block of 600x200 is assumed, but this regular plan is not recommended for consideration, though some such definite basis must be used to obtain a ready comparison of the different methods possible.

The three forms of housing that are prevalent in this country to-day are:

First, the regular New York row type, consisting of continuous straight blocks extending around the full perimeter of the plot and creating probably one of the most unsatisfactory arrangements in permanent housing that has been evolved.

Next, and equally unsatisfactory, though allowing a little more apparent ventilation, is the Philadelphia cross-road type of house with the back alleys.

Then, there is the arrangement of cottages in rows, varied, of course, as one-family or two-family houses and interspersed with some few grouped structures; also houses joined together side by side, making different arrangements and artistic combinations, giving each man his own private establishment, his

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own little garden, his own furnace for heating the house in winter, his own range for cooking, etc.; in fact, a complete self-contained unit, and this has been looked upon as the highest type of housing improvement. But, is it so?

It is possible to create a development complying with every esthetic and hygienic requirement, possessing far more satisfactory living conditions and providing greater benefits to the inhabitants, and to do it with less building material, less labor, more open space for garden and playgrounds, and with a saving of anywhere up to 20 per cent. of the total financial outlay.

It is possible to house, by a different method equally advantageous in most respects and infinitely better in others to a cottage scheme, six families at the cost of housing five and obtaining this result with possibly between a 10 or 15 per cent. reduction in the number of building workers required to construct the same.

This sounds as though it might be rather an exaggeration; but if it is not so, why has the principle not been adopted most extensively?

In the first place, the principle has been adopted by the great majority of those with the ability to do in practically all of the larger cities. How many people to-day, for instance in New York, live in houses when they can live in apartments? The household servant question is much reduced, the furnace man and his attendant idiosyncrasies are avoided. Here is a known paid annual rent and expense charge and a sense of security that exists due to the congregation of many people at one point and a latent freedom from care and simplification of living, difficult to reduce to words.

All these advantages accrue with great force to the very small household where the husband and wife have to do all the work themselves. Therefore, why not take advantage of this in Government housing? Why should not the shipworker or munition worker have such living conditions that, when he gets home tired and dirty, he knows hot water will be awaiting him irrespective of whether his wife stayed at home to keep the range going or not? Why on the cold days, when none wishes to go down and tend to a furnace the last thing at night and the first thing in the morning, should he not have the advantage of a central heating plant that the apartment house dweller has?

There is no reason why these advantages should not be given to the worker, provided at the same time he is given all of the privacy that a house would give him and all of the advantages that a house would have with none of its disadvantages, at no greater or perhaps at a less cost. This can all be furnished.

For instance, upon a typical plot 600x200 it is possible to arrange on forty-foot lots thirty two-family houses, which is practically

the maximum number of families that could be placed on such a piece of land with the cottage form of housing. But by using small apartment houses, only two or at the most three stories high in a few places for the sake of artistic value, that is, with only the same number of stairs as in the cottage, it is possible to provide 104 family units equally large and complete on this same ground area of 600x200.

Assuming an arrangement such as follows, which would embody the nearest to the ideal living conditions consistent with the requirements: First, a block of small apartments; next, a block 600x150 given up to allotment gardens; then another block 600x200 given up to apartment houses; next to this, again a plot 600x150 given up to children's playgrounds, etc., and so on, so that between every row of houses there will be free of all construction a block of over 200 feet from front to front. In the rear, these apartments would have exactly the same space that the very best arrangement of the cottages could give.

The roofs of these small apartments should be used as a drying yard for the clothes, thus leaving the entire space between the houses for ornamental gardens, a place of quiet and repose. Each apartment or flat should have its own private entrance, the same as a house would have. Within the space of each apartment should be provided a loggia, which, in effect, is a protected exterior room, having all the advantages of a porch, so that when the wife wishes to go out she could leave her child on this in the fresh air and with a sense of absolute security, knowing that no harm would come to the little one, as is possible on an ordinary open porch. This loggia could be used as sleeping porch, as it would not have the undue conspicuousness of the ordinary porch, also none of the habitable rooms would be darkened by being under the shadow of a porch.

Such an arrangement of buildings lends itself readily to this treatment, as there are so many exterior angles, all very suitable for these porches, with allotment gardens as here contemplated.

All the storage space needed can neatly be arranged in the basement, and the advantages that the rich man has in his Fifth avenue apartment can be extended to the worker at a cost less to him per family unit than is now being expended to-day in providing him with lesser benefits in the individual cottage.

Community garages could be equipped at the end of the allotment gardens without in any way interrupting this arrangement, and with these gardens as here contemplated any active spirit can go out and take all of the exercise he wishes and at the same time the children can play in the grounds in safety, an absolutely impossible condition if each house was built upon its individual lot.

The workers who prefer to rest after their

day's work can sit in the ornamental garden in the centre of the house away both from the allotment gardens, and playgrounds, without having the annoyance of hearing a neighbor's drying clothes flapping continuously nearby.

By artistically arranging these small apartments into either two, four, six, eight or ten units or groups as desired for effect, all of the variety and esthetic arrangements possible with the most expensive type can be achieved.

The cost of installing and maintaining what may be termed equipments, for gas, electricity, water and sewerage, would be immensely reduced in the apartment house plan over that of the cottage plan; also a very great saving would be brought about by the use in these apartments of common exterior walls, the simplification of construction, as regards roofs, floors, staircases, piping, etc.; in fact, they would be substantially similar to a fabricated boat, and yet have all of the variety and every advantage for health and good living that can be desired.

In the course of the author's practice, he has talked with workers and their families in most of the States extending from Texas to the Canadian border and there seems to exist no great desire among the workers for the individual house that has so long been assumed. A very marked majority and all who have apparently thought about the matter, with any seriousness, express a decided preference to living in reasonable proximity to each other, provided they have all the privacy of a house, and have the allotment gardens, children's playgrounds, with its swimming pools, tennis courts, sand piles, swings, etc., and also their general private garden for ordinary use. These additional attractions to the worker's mind far exceed the attractiveness of the small individual house on its own lot.

Of course, the viewpoints of the worker and the employer are very different when it comes to the disposing of these houses. The employer feels that if he can get his workers to purchase houses in a certain location, they will be, comparatively speaking, tied to the spot and he will thereby stabilize his labor turnover; but the worker, from his side, naturally will hesitate before purchasing his home, unless he is assured that he will always be able to get employment in this locality, and this assurance is impossible, seeing that every one of the houses being built by the Government was not required in normal times—that is, before the war started.

The American public, as represented by the Government, should look upon housing at this stage as a war expenditure—to create a greater efficiency in labor and to produce munitions and ships with dispatch—and any scheme predicated upon the purchase of homes by the workers is foredoomed to failure.

In the regular routine of living to-day, unattached men and women are assumed as living as boarders, and are, so to speak,

transients, able to move to where work is offered; so is it fair to ask the married man, who has already assumed the serious responsibility of providing for a family, to agree to tie himself up permanently by purchasing a house without having any corresponding assurance that he will be able to get continued employment to enable him to pay for the same, and within a reasonable radius of the location of the house itself?

When the world has become stabilized again after the war, there is no reason why workers should not purchase the houses no matter of what type, if the local industries should justify; but it must be remembered that the worker to-day has to bear his proportion of the war's direct and indirect tax, shoulder to shoulder with all the rest of us, so we cannot assume that he will invest his savings now in a house which quite possibly might be in an unsatisfactory location for him and consequently result in a loss to him.

Where corporations are, or ultimately become, responsible for the cost of the workers' homes constructed during the war, they naturally will select a type of house that the large insurance companies and savings banks prefer to loan on. And it can safely be stated that an apartment house type would look much more inviting for a mortgage than an individual house scheme. Considering the large amount of land given up to allotment gardens and all the additional attractions, should the locality need some special accommodation, this can be provided right in the midst of the development and not somewhere a long way off. The unquestioned and demonstrated advantage of the apartment house type of accommodation is so marked, not only as to original cost, rapidity of construction, economy of building material and skilled labor needed in the actual building so vitally important at this time, and also in maintenance or upkeep cost, that it supplies not only what the worker actually wants himself, but what is precisely the best for him from every angle.

England has definitely learned the lesson and is providing the workers with homes of the collected or intensive type. So, knowing the difference of the temperaments and requirements between the workers here, why not make some use of the knowledge we possess and face the problem squarely and logically by providing housing of the low apartment type, heated and cared for from a central station, with ample playground and garden space all around, and rent them to the workers with the definite understanding that there may be some readjustment as to ownership after the war is over?—"Architectural Record."

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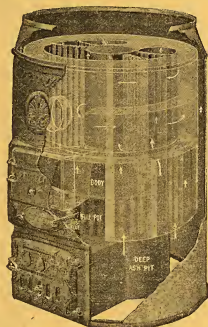
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Vol. XXXIII., No. 42
October 16, 1918

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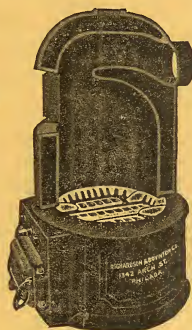
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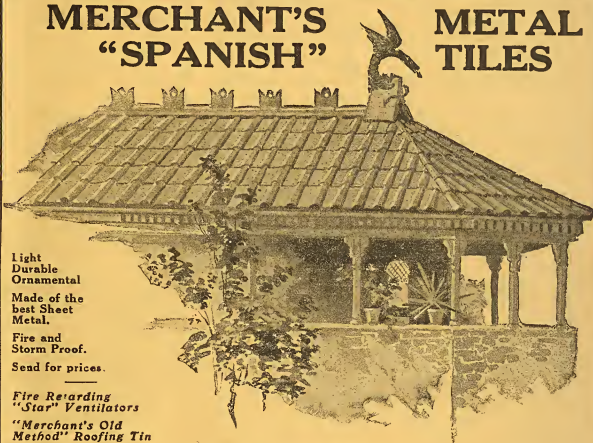
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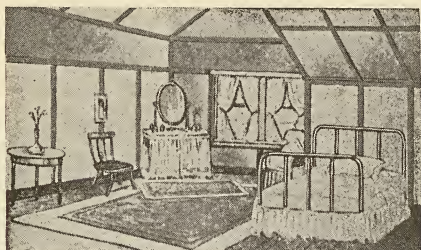
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PHILADELPHIA
October 16, 1918.

BUILDERS' GUIDE

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As The Editor Sees It



LAST week THE GUIDE printed a summary of the recent ruling of the War Industries Board with respect to the building trades and business in general. As was to be expected, all business essential to the war is given priority, and everything will be done to facilitate the operation of plants engaged in war enterprises.

Where building is concerned, new work is limited practically to industrial housing and plants for war essentials. But, as we pointed out last week, there is so much big Government work that the big contractors are more than busy and the smaller contractor will be occupied with the alterations which must take the place of new work until the end of the war.

One of our contemporaries, the *Building Age*, echoes our optimistic view of the situation, expressed last week, and says:

"There is ground to believe that building will be stimulated rather than hindered by the order. The result is almost certain to be a speeding up of essential work, merely causing the cessation of work that is unimportant, which work should not be tolerated during the present emergency.

Any architect or builder who has tried to put through an important project not directly connected with the winning of the war will testify that his work has been held up for lack of materials and labor. If a trip to Washington were logical as the sole means of getting through absolutely essential materials,

the discovery was made that hot air was all that could be obtained. There was no centralization of authority; this lack is remedied by the new regulations.

The new regulations are going to practically guarantee materials to the work which is authorized as essential. This work will go ahead, rapidly and undisturbed. All other work will be eliminated.

The past few months have already eliminated much unessential construction, only that being undertaken which was absolutely necessary.

Therefore there is every occasion to believe that the only result of the Government's regulations will be the speeding up of authorized buildings.

The farmer, as an essential factor in the winning of the war, will in all probability be encouraged to build wherever necessary.

Buildings needed to insure better sanitation and decent housing facilities are not under the ban, says Mr. McAdoo."

The text of the Government's ruling as regards the erection of a building costing more than \$2,500 is as follows:

"Any person interested in a construction project must apply, with a full statement of the facts under oath, to the appropriate local representative of the various State Councils of Defense.

"This representative of the State Council will investigate the necessity of the proposed construction and transmit recommendations to the State Council for review.

"The State Council will review the

case, and, if it decides in favor of the construction, it will at once send its recommendation, with a full statement of all the facts, to the non-war construction sections of the Priorities Division of the War Industries Board. The non-war construction sections will grant or withhold the permit and so notify the State Council of Defense, and the individuals concerned.

"If the State Council decides against the proposed construction, it will notify the person concerned that his project has been disapproved.

"The War Industries Board will inform all persons applying directly to it that they must first take up their projects with the appropriate local representative of the State Council of Defense.

"The ability of the War Industries Board to enforce this whole plan rests upon the fact that it controls priorities and has also secured from the manufacturers of building materials a pledge not to supply materials for projects which are not authorized under the regulations of the War Industries Board.

Regarding essential work the ruling is: "Structures, roads, or other construction projects falling within the following classifications are hereby approved, and no permits or licenses will be required therefor:

"(1) After having first been cleared and approved by the War Industries Board, those undertaken directly by or under contract with the War Department or the Navy Department of the United States or the United States Shipping

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"(2) Repairs of or extensions to existing buildings involving in the aggregate a cost not exceeding \$2,500.

"(3) Roadways, buildings and other structures undertaken by or under contract with the United States Railroad Administration or a railroad operated by such administration.

"(4) Those directly connected with mines producing coal, metals and ferro-alloy minerals; and

"(5) Public highway improvements and street pavements when expressly approved in writing by the United States Highways Council.

"No building project not falling within one of the foregoing classes shall be undertaken without a permit in writing issued by or under the authority of the chief of the non-war construction section of the Priorities Division of the War Industries Board."

* * *

PERHAPS the builder who has allowed himself to become discouraged by the recent restrictions placed on building by the War Industries Board may find inspiration in these suggestions concerning "Remodeling Jobs that Are Yours for the Asking":

It is always possible for the builder with original ideas to promote new business for himself and for others. No matter how unusual the times; no matter how great the difficulties may seem, the builder can always find enough to do to keep at least a small force of workmen busy. There are no good reasons for any builder or contractor to remain inactive when regular business is scarce. There is plenty of new business on every side for anyone who will make the effort to develop it.

The practical builder—the one who is capable of turning his hand to almost any kind of building work—is in a more advantageous position than other business men who are engaged in other fields of labor. During slow and uncertain periods of time, while many other business men are forced to wait for better conditions, the builder can start out on a walk through his town or city, and if he possesses a keen eye and a thoughtful mind, he will return from his stroll with some new business in hand. In other words, the builder with ideas, whenever he pleases, can go out in the world and create business.

It is the writer's purpose in presenting this article to explain how certain builders and contractors of Philadelphia have made new business for themselves during "quiet" seasons. It is hoped that the

ideas which will be set down in the following paragraphs will serve as good suggestions for other builders and contractors. If the ideas are not new to some readers, the methods through which the ideas were developed should at least be instructive and interesting. The principal thought of the writer is to explain how the new business was "created."

In one section of Philadelphia is an exceedingly large street car barn. Near this barn is a considerable number of small homes, built in solid rows. There are also a few stores at the corners of streets. Directly across from the front of the car barn there had been a row of small houses with store fronts. For some reason these stores had proved failures for small merchants in various lines, and for a long time the stores had remained vacant. In fact, the entire row of houses had been empty for more than two years, as few people cared to rent the houses (which were small) with the vacant stores serving no useful purpose. It was a great loss for the owner of the houses, of course.

One day an enterprising building contractor called on the owner of the idle homes. The builder stated that he desired to offer a suggestion which, if adopted, he felt sure would be the means of renting all of the houses within a short time. Naturally, the owner was all attention.

"My idea is to have those store fronts changed over to Dutch halls and parlors," the builder explained. "I have drawn plans whereby the transformation can be made at comparatively small expense. There would be only a little brickwork. In place of the plate glass fronts, there would be triple windows of the Colonial type. The entire improvement would cost only \$...., and with the great demand for small homes at the present time, I feel that you could easily rent the houses at \$50.00 monthly. That's more than you could get, even if you were successful in renting the buildings as they now stand. The additional gain in rent would soon pay for the improvement."

"I believe that you are right," admitted the owner thoughtfully. "Your figures for the improvement are far less than I would have thought possible. All right, go ahead with the work. I like your idea of the Dutch hall and parlor, and the triple window plan. According to your sketch, the houses when the improvement has been completed will look like new."

Within several weeks the builder had finished the work, and even while the changes were being made a number of people rented houses. More than a thousand motormen and conductors were connected with the carbarn across from the homes in question, and many of these,

who had no interest in the store buildings, were deeply interested when the stores were replaced by attractive houses. After the change had been made, the owner could have rented perhaps several hundred more of such dwelling places had they been in the neighborhood.

Now, while it is often the case where it would pay an owner to have homes converted into stores and business places, according to the location, it is likewise true that in some instances (like the case mentioned) it would pay to have small stores changed over to private houses. In practically every city one can find certain sections where there are too many small stores. It may be that a considerable number of these stores have been vacant for long periods. There is not sufficient local business to keep all of such stores occupied in business. So, why not have the store fronts transformed after the plans which have been mentioned? Here are opportunities for builders to "create" new business for themselves as well as business for the owners of vacant stores.

In some sections of Philadelphia there are rows of two and three-story houses, built with plain brick fronts, and with three or four stone steps leading to the doorway. When in good physical condition, a home of this model is always popular, although within the last few years the homes with front porches are the most popular. In one of the districts of the city referred to several rows of plain-front houses had been run down physically, and they had been empty for more than a year. Through the good work of a builder who makes a specialty of repairing, the old houses were renovated, and to-day they are occupied by a desirable class of tenants.

The builder who put these houses in good shape has worked up an idea in the way of a porch for a plain-front residence which promises to prove very popular in the near future. The porch is of the "set-in" type—that is, it occupies part of the space which had previously been taken by the parlor of the house. It should be mentioned that the parlor had been spacious, so the parlor was not made too small by taking away the necessary space for the porch. The floor space of the porch is about 16 feet wide by 7 feet deep. In making the improvement, the brick front of the first floor of the house was removed, and a girder was inserted to support the rest of the brick front. The bricks, window sashes and door, which had been removed, were used again for building a front to the house at the back of the porch. The same stone steps were used as steps to the porch. The floor of the porch is flush with the original floor of the parlor,

(Continued on Page 581.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residence, northwest corner City Line and Limekiln Pike, \$12,000. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Frame and stucco, 3 stories, 60x26 feet, wing 16x14½ feet, shingle roof, hot water heating, electric lighting, hardwood floors, tile and marble work. Plans in progress.

Apartment Building, West Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner's name withheld. Brick, 4 stories, 44x66 feet, will contain 24 two and three-room suites, slag roof, electric lighting. Plans in progress. No bids will be taken at this time.

Store (alts.), 2627-29 Germantown avenue, Philadelphia. Architect, private plans. Owner, Stephen C. Seeberger, New York City. Lessee, Woolworth Co., New York City. New front, brick party wall, wood and tile floors. Owners are taking bids. Smith-Hardiean Co., 1606 Cherry street, Philadelphia, is figuring.

Bridges (4), Sedgley avenue, Glenwood avenue and Ontario street, over North Penn Branch of Reading, and Evergreen street, over Chestnut Hill Branch of Reading. Architect, private plans. Owens, City of Philadelphia, Bridge Division, Department of Public Highways, care of George E. Datesman, Director, City Hall, Philadelphia. Cleaning, painting and new wooden decks. Lowest bidder, Mundy Cont. and Paving Co., 228 South Alder street.

Cooking School, Spec. 3465, Gray's Ferry Naval Home, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story. Office Building, 35x22 feet; Cooking School, 48x85 feet; Ware House, 80x24 feet, ready roof, steam heating, electric lighting, cement and pine floors, roof ventilators. Owners taking bids, due October 21st at 11 A. M. Wark & Co., 1737 Filbert street; John M. Yardley, 1716 Sansom street; Thos. C. Trafford, 1613 Sansom street, Lam Building Company, 1001 Wood street; Thomas Reilly, 1616 Thompson street; Monaghan & Losse, Inc., 3016 Chestnut street; George F. Pawling Co., 1432 South Penn Square, and Melody & Keating, 1322 Race street, are figuring.

Office, Locker, Wash Room and Toilet add. of Blacksmith Shop, Cramp's Shipyard, Philadelphia, \$3,000. Owners, Wm. Cramp & Sons, S. & E. Building Co., Norris and Richmond streets. Miscellaneous alterations and repairs.

Warehouse and Garage, 522-32 North Third street and 521-31 North Orianna street. Architect, Carl P. Berger, South Penn Square Building, Philadelphia. Owners, Northern Liberties Realty Co., care of architect. Brick (slow burning), 1 story, 100x105 feet, slag roof, electric lighting, roof ventilators. Architect has received bids.

Cooking School, Spec. 3465, Gray's Ferry

Naval Home, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story. Office Building, 35x22 feet; Cooking School, 48x85 feet; Warehouse, 80x24 feet, ready roof, steam heating, electric lighting, cement and pine floors, roof ventilators. Owners taking bids, due October 21st at 11 A. M. Wark & Co., 1737 Filbert street; John M. Yardley, 1716 Sansom street; Thomas C. Trafford, 1613 Sansom street; Lam Building Co., 1001 Wood street; Thos. Reilly, 1616 Thompson street; Monaghan & Losse, Inc., 3016 Chestnut street; Geo. F. Pawling Co., 1432 South Penn Square; Melody & Keating, 1322 Race street; F. L. Hoover & Son, 1023 Cherry street, and Hogg Const. Co., 1634 Sansom street, are figuring.

Lumber Shed and Stable, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Hückendorn, Frankford Arsenal. Steel, reinforced concrete, brick, terra cotta coping, granite, 1½ stories, 100x150 feet, and 2½ stories, 65x36 feet, slate, slag and cement tile roof, cement, maple and wood block floors, hollow tile, metal lath, electric elevators, carborundum treads, roof ventilators, concrete foundations, rolled steel sash and skylights, fire doors, kalamein doors and trim, steel plate and steel doors, wire work. Owners have received bids.

Bank (add.), 4352-54 Frankford avenue, Philadelphia. Architect not selected. Own-

ers, Second National Bank, 4346 Frankford avenue, Philadelphia. Site secured. Work contemplated.

Office, Garage Building and Manufacturing Building, Roberts and Stockley streets. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owners, the American Insulation Co., on premises. Office and Garage Building, 2 stories, 83x24 feet; Manufacturing Building, 2 stories, 141x83 feet; Power House, 1 story, 30 feet 100 inches x48 feet. Brick, steel, reinforced concrete and terra cotta, slag and rubber tile roof, stone foundations, cement floors, metal lath, tile, marble and terrazzo work, rolled steel sash, metal clad, kalamein and frame doors, safety treads, metal weather strips, waterproofing, iron work. Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia, taking sub-bids.

Blacksmith Shop, Nicetown, Philadelphia. Architect, private plans. Owners, U. S. Midvale Gun Plant, Widener Building, Philadelphia. Brick, steel and concrete. Terra cotta coping, 1 story, 242x90 feet, and 2-story wing, 20x61 feet, concrete foundations, slag roof, concrete floors, steam heating (electric wiring and fixtures reserved), metal lath, rolled steel sash. Owners taking bids, due as soon as possible. Barclay White & Co., 1713 Sansom street; F. W. Mark Cont. Co., Finance Building; Irwin & Leighton, 126 North Twelfth street; Wm. Steele & Sons Co., Sixteenth and Parkway; Geo. F. Pawling Co., 1432 South Penn Square, and Wark & Co., 1737 Filbert street, are figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Water Supply, Sewerage and Drainage System, Spec. 3396, Emergency Hospital, Navy Yard, Philadelphia, \$26,800. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Cast iron pipe and fittings, pump house and manholes, reinforced concrete work, brick work, waterproofing, ready roofing. Contract awarded to Bruno Pizzimenti, Pitman, N. J.

Residences (3), Bryn Mawr and Overbrook avenues, \$54,000. Architect, Frank Seeberger, Pennsylvania Building, Philadelphia. Owner, Thomas F. Reilly, Pennsylvania Building, Philadelphia. Stone, 3 stories, 51x27 feet, 49x26 feet and 42½x27 feet, stone foundations, shingle and slate roofs, hot water heating, electric lighting, hardwood floors, tile work. Owner will buy.

Shed, Thirty-first street, south of Chestnut street, \$2,800. Architect, private plans. Own-

ers, Bridgman Bros., 131 South Thirty-first street, Philadelphia. Brick, 1 story, 17½x128 feet, stone foundations. Contract awarded to John Borden & Bro., 637 North Nineteenth street.

Factory (add.), Hilton street and Kensington avenue, \$7,000. Architect, private plans. Owner, Max Sartert, Kensington and Allegheny avenues, Philadelphia. Brick, 2 stories, 34x54½ feet, slag roof, cement floors. Contract awarded to H. Brocklehurst, 512 West Norris street.

Garage, 1211 Fisher's avenue, Philadelphia, \$700. Architect, private plans. Owner, William Goodwin, 1211 Fisher's avenue, Philadelphia. Brick, stone foundations, 1 story, 14x18 feet, slag roof. Contract awarded to Wm. J. Baltz, 709 Butler street, Philadelphia.

Garage (add.), northeast corner of Allegheny avenue and Hancock street, \$1,500. Architect, private plans. Owners, J. R. Keim

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& Co., on premises. Brick, 1 story, 22x38 feet, slag roof, cement floors, hollow metal skylights. Contract awarded to Robert E. Lamb Co., 843 North Nineteenth street, who are taking sub-bids.

Freeman Building (alts.), Twelfth and Walnut streets, Philadelphia. Architects, Simon & Bassett, 249 South Juniper street, Philadelphia. Owners, Banks Business College, 925 Chestnut street, Philadelphia. Macite partitions, vapor heating, electric lighting, tile and terrazzo work, hardwood floors. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

Restaurant Building, Nicetown, Philadelphia, \$25,000. Architect, private plans. Owners, U. S. Midvale Gun Plant Co., Widener Building, Philadelphia. Brick, 1 story, 84½ x60 feet, and 13x34½ feet, slag roof, concrete foundations, concrete and granolithic floors, rolled steel sash (heating, electric work, kitchen fixtures and cooking implements, refrigerator and ice machine reserved by owners). Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway.

Boiler Plant, Nicetown, Philadelphia. Architect, private plans. Owners, U. S. Midvale Gun Plant, Widener Building, Philadelphia. Brick, steel, concrete, terra cotta coping, 1 story, 92x48 feet, slag roof, rolled steel sash, safety treads, waterproofing, steel stairs (wiring reserved). Contract awarded to Barclay White & Co., 1713 Sansom street.

Machine Shop, Milner and Eighth streets, Tacony, \$25,000. Architect, private plans. Owners, Tacony Ordnance Co., Tacony, Philadelphia. Brick, 1 story, 72x128 feet, slag roof, concrete foundations, cement floors, rolled steel sash. Contract awarded to F. W. Mark Cont. Co., Finance Building, Philadelphia.

Shower Toilet and Locker Room, Eighteenth and Allegheny avenue. Architect, private plans. Owners, Cresson-Morris Co., Eighteenth and Allegheny avenue, Philadelphia. Brick and concrete, 1 story, 43x33 feet, slag roof, cement floors, rolled steel sash, roof ventilators. Contract awarded to Raith Const. Co., 304 Master street, who are taking sub-bids.

Shouldn't you be a regular subscriber to a paper, such as the "Guide," that fights your battles?

Miscellaneous Construction News

Pump House, Spec. 3482, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, care of Supply Officer, Navy Yard, Philadelphia. Brick, 1 story, 21½x27½ feet, asbestos shingle roof, cement floors, concrete foundations (heating and electrical lighting reserved). Lowest bidders: Wark & Co., 1737 Filbert street, \$4,598; Lam Building Co., 1001 Wood street, \$4,690; W. O. Springer, 1624 Latimer street, \$5,788.

Women's Lavatory, Marcus Hook, Pa. Architect, private plans. Owners, Sun Co., Marcus Hook, Pa. Frame, 1 story, 41½x16½ feet, ready roof, cement and wood floors. Owners taking bids. Barclay White Co., 1713 Sansom street, are figuring.

Coaling Station and Pits, Saucon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R. Co., Reading Terminal, Philadelphia. Reinforced concrete and steel. Owners taking revised bids. Roydhouse-Arey Co., 112 North Broad street, is figuring.

Air Compressor Building, Rutherford, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and

Reading Railway Co., Reading Terminal, Philadelphia. Concrete and frame, 1 story, 30x65 feet, K. & M. shingle roof, concrete floors. Contract awarded to Daniel H. Hunter, Reading, Pa.

Generator House and Purifier House, Camden, N. J. Architect, private plans. Owners, Public Service Commission, Camden, N. J. Brick, steel and concrete, 2 stories, 35x78 feet and 38x134 feet, slag and corrugated iron roof, cement floors, electric lighting. Owners taking revised bids. J. S. Rogers Company, Drexel Building, Philadelphia, are figuring.

Naval Torpedo Assembly Plant, Spec. 3425, Alexandria, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete, 4 stories, 299x122 feet; 2 stories, 114x245 feet, built-up roof, cement, brick and wood block floors, hollow tile, metal lath, 5 electric elevators, safety treads, reinforced concrete foundations, steam heating, electric lighting, rolled steel sash, metal covered doors, steel rolling doors. Contract awarded to Fleischmann Const. Co., New York City, \$1,075,000.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Residence, Bryn Mawr avenue, south of Overbrook avenue, Philadelphia, \$18,000. Architect, Frank Seiberger, Penn Building, Philadelphia. Thos. F. Reilly (O and C), 1103 Penn Building, Philadelphia. Stone, 2 stories, 51x27 feet, stone foundations, slate roof, hot water heat, hardwood floors.

Residence, Bryn Mawr and Overbrook avenue, Philadelphia, \$18,000. Architect, Frank Seiberger, Penn Building, Philadelphia. Thos. F. Reilly (O and C), 1103 Penn Building, Phil-

adelphia. Stone, 3 stories, 49 feet 4 inches x26 feet 4 inches, stone foundation, shingle roof, hot water heat, hardwood floors.

Residence, Bryn Mawr and Overbrook avenue, Philadelphia, \$18,000. Architect, Frank Seiberger, Penn Building, Philadelphia. Thos. F. Reilly (O and C), 1103 Penn Building, Philadelphia. Stone, 3 stories, 43 feet 6 inches x27 feet, stone foundation, hot water heat, slate roof, hardwood floors.

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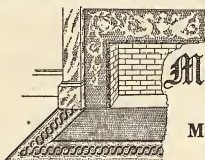
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Alterations and Additions**

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Philadelphia

Store, 5012 Lancaster avenue, Philadelphia, \$500. Michael Celenza (O), 5012 Lancaster avenue, Philadelphia. John Morris (C), 4953 Thompson street, Philadelphia. Two-story brick addition, 30x14 feet, 24 feet high, flush bulk, stone foundation.

Foundry, Mascher street and Duncannon avenue, \$1,000. Fairmount Foundry Co. (O), Mascher street and Duncannon avenue, Philadelphia. Wm. H. Ashton (C), 5600 Mascher street, Philadelphia. New windows, corrugated iron.

Dwelling, southwest corner of Fifty-fourth and Delancy street, Philadelphia, \$450. T. J. Carey (O), 5412 Delancy street, Philadelphia. D. J. Carey (C). Two bay windows, 9 feet wide, and general alterations.

Factory, Scotts Lane and Ridge avenue, Philadelphia, \$10,000. John & James Dobson, Inc. (O and C), on premises. Interior alterations, new girders, new skylights and general repairs.

Shed, Scott Lane and Ridge avenue, Philadelphia, \$300. J. & J. Dobson, Inc. (O and C), on premises, 20x40 feet.

Factory, northeast corner of Darien and Noble streets, Philadelphia, \$6,900. Rosenau & Co. (O), on premises. W. O. Springer (C), 1624 Latimer street. Boiler room and foundations, interior alterations, brick.

Signal Tower and Office, Philadelphia and Reading R. R. and Luzerne street, \$14,500. Philadelphia and Reading R. R. Co. (O), Reading Terminal. C. E. Pace (O), Merion, Pa. Brick, 2 stories, 22x17 feet 6 inches, and 1 story, 21x17 feet 6 inches, brick walls, concrete foundations, slag and slate roof.

Battery House, Philadelphia and Reading R. R. and Luzerne street, Philadelphia, \$3,500. Philadelphia and Reading R. R. Co. (O), Reading Terminal. C. C. Pace (O), Merion, Pa. Brick, 1 story, 10 feet 5 inches x17 feet, concrete foundation, slag roof.

Battery House, Philadelphia and Reading R. R. and Erie avenue, Philadelphia, \$4,000. Philadelphia and Reading R. R. Co. (O), Reading Terminal. C. C. Pace (C), Merion, Pa.

Brick, 1 story, 10 feet 5 inches x19 feet, concrete foundation.

Garage, Foulrod and Romain streets, Philadelphia, \$500. J. D. Fotheringham (O and C), Abbott and Custer streets. Brick, 12x18 feet, cement floor, slag roof.

Signal Tower, Philadelphia and Reading R. R. and Erie avenue, \$14,000. Philadelphia and Reading R. R. Co. (O), Reading Terminal, Philadelphia. C. C. Pace (C), Merion, Pa. Brick, 2 stories, 22 feet 6 inches x17 feet 6 inches; signal tower, office building, 1 story, 26 feet 8 inches x17 feet 6 inches, concrete foundation, concrete floor, slag and slate roof.

Work Shop, Thirtieth and Spring Garden streets, Philadelphia, \$300. Peoples Bros. (O), Twenty-fifth and Callowhill street. J. F. Wolf (C), 147 North Vogdes street. New cement floor.

Store and Dwelling, Thirty-third and Kensington streets, Philadelphia, \$900. Harry Goldberg (O), 3311 Kensington avenue. Wm. E. Stone (C), 2069 East Dauphin street. Brick, 10x12 feet, slag roof.

Party Wall, 4335-40 Lancaster avenue, Philadelphia, \$500. L. C. Funk (O), 831 North Forty-first street. J. P. Brown (C), 614 Union street. Brick repair work, stone wall, concrete foundation.

Garage, rear 133 West Horter street, Philadelphia, \$1,150. Robert Kellough (O and C), Wayne and Duval streets. Stone, 1 story, 18x23 feet, slate roof, stone foundation.

Factory, Venango, west of Hope street, Philadelphia, \$7,000. J. M. Kennedy (O), Tenth and Chestnut streets. Frederick Kennedy (C), Boudinot and Westmoreland streets. Brick, 1 story, 90x106 feet.

Factory, southeast corner of Hilton and Kensington avenue, Philadelphia, \$7,000. Max Sarfert (O), Kensington and Allegheny avenue, Philadelphia. H. Brickelhurst (C), 512 West Norris street, Philadelphia. Brick, 2 stories, 34x54 feet 6 inches, slag roof, skylight.

Garage, northeast corner Allegheny avenue and Hancock street, Philadelphia, \$1,500. J.

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R. Keim & Co. (O), Allegheny avenue and Hancock street, Philadelphia. R. E. Lamb (C), 843 North Nineteenth street, Philadelphia. Brick, 1 story addition, 22x38 feet.

Garage, 1211 Fisher's avenue, Philadelphia, \$700. William Goodwin (O), on premises. Wm. J. Baltz (C), 709 Butler street. Brick, 1 story, 14x18 feet, stone foundation.

Residence, 1521 Spruce street, Philadelphia, \$1,375. Mrs. Caroline F. Simons (O), 116 S. Sixteenth street, Philadelphia. John Baizley (C), 514 South Delaware avenue. Fire escape and fireproofing, metal windows and doors, wire glass.

Dwelling, 1624 South Ninth street, Philadelphia, \$525. Vincent Gangemi (O), on premises. John Diodate (C), 840 Mountain street. Brick addition, 2 stories, 18x16 feet, slag roof.

Garage, northwest corner of Marvine and Duncannon avenue, Philadelphia, \$350. Louis Schueller (O), on premises. W. A. Roth (C), 1215 Chelten avenue. Brick, 12x16 feet.

Shed, Thirty-first, south of Chestnut street, Philadelphia, \$2,800. Bridgeman Bros. (O), Thirty-first and Chestnut streets. John Borden & Bros. (C), 637 North Nineteenth street. Brick addition, 17 feet 6 inches x128 feet, stone foundation.

Crane Runway, southwest corner of Cabot and York street, Philadelphia, \$500. Chas. F. Datz Co. (O and C), 842 North Fifth street, Philadelphia. 20x70 feet.

Boiler Installation (alts.), 710 North Percy street, Philadelphia, \$900. Kaufman Co. (O), on premises. Dorsey Smith (C), 111 North Seventh street, Philadelphia.

Warehouse, fire repairs, 1536 North American street, Philadelphia, \$350. Harvey B. Cassel (O), on premises. Frank A. Stoll (C), 1432 Germantown avenue, Philadelphia.

Open Shed, southeast corner of Twenty-fifth and Tasker streets, Philadelphia, \$500. H. O. Medley (O and C), on premises. 50x60 feet, felt roof.

Office, west side of York Road, west of Butler street, Philadelphia, \$1,000. Charles F. Felin Co. (O), York Road and Butler street. Joseph A. Fischer (C), 4437 North Ninth street, Philadelphia. Brick, 2 stories, 13x20 feet.

When you stop to consider that the Guide reaches every week and is read by architects, builders, building owners, contractors and sub-bidders in every branch of building construction, you must perceive its unique importance as a medium for advertising with an appeal to that class. Every copy reaches a live prospect.

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AS THE EDITOR SEES IT.

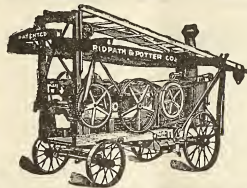
(Continued from Page 576.)

which is elevated about four feet above the street level.

This is an idea which no doubt could be followed with advantage in many cities where there are rows of plain-front brick houses which are in need of renovating. The "set-in" porch greatly enhances the appearance of the house, and the porch is far more useful to those who occupy the house than stone steps. Old, "straight-front" homes can be changed over to better models merely by the addition of porches of the kind described. With old houses completely renovated inside and outside, and with porches built in them, the owners could secure higher rents; a better class of tenants would be gained, and the owners would be helping to beautify their city.

Speaking of porches, another builder is making a specialty of building portable porches for plain-front houses. The porch is so constructed as to set on the sidewalk in front of the house. Some of these porches are made entirely of wood, others have steel frames with the floor of wood. The floor of the porch lines up with the top of the steps in front of the house. The construction of the porch of this design is such that it can be "knocked down" in small sections, and can be stored away in the basement of the home during the winter. The floor space of the portable porch is about 10 feet by 4 feet, giving just enough room for three or four rockers. The idea in having such a limited amount of floor space is not to take up too much space of the sidewalk. A porch of this model is far more useful to the people than small stone steps in front of the house. With a neat awning hung above the porch, the whole effect is pleasing to the eye.

There is another type of porch which during recent years is appearing in considerable numbers in front of plain-front homes of Philadelphia. This porch is built of brownstone throughout, and it presents a handsome appearance. The railing is low, cut from brownstone in an artistic pattern. The supports are also of the brownstone, and they are of graceful form. The plans have been arranged to include two regular stone steps in front of the house as a part of the porch.


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As a rule, the steps are of brownstone of the same kind as used for the porch. A stranger in the city would readily believe that a brownstone porch of this character had originally been built along with the house.

Several builders of Philadelphia are making a specialty of erecting rows of small private garages on long, narrow lots which could not be well used for other purposes. One recent operation consisted of fifteen of the garages. They are set on a piece of ground in size about 100 feet long by 12 feet deep. The back wall of the row of garages is of brick. The walls which separate the garages are of corrugated iron. The doors are of wood, and there is a window in each door. The floors are of concrete. There are electric lights for each garage.

The garages are rented by the month to people in the neighborhood who own automobiles. The row of buildings is numbered from No. 1 upwards. Mr. Brown, for instance, rents No. 3 garage, and so on. This idea has been so successful that the builders have found it advantageous to erect rows of the private garages on various small and odd-shaped lots of the city. Some of the garages are built entirely of brick, with the exception of the roofs and doors. Others have been constructed of brick and corrugated iron. There are no heating plants.

One builder has developed an extensive business in special repair work and improvement work of all kinds. His principal work is renovating homes of the better variety. Parquet floors and hardwood window seats are put in houses which originally had lacked these desirable features. Some houses are completely remodeled. Wood-and-glass partitions are built for fronts and sides of porches. Outside kitchens for homes are

built of corrugated iron, of wood or of brick. There are many other kinds of improvement work, and in most cases the builder "creates" the orders by calling on the owners of the property and by offering suggestions for the improvements in question.

Not long ago this builder heard of a certain row of houses which, while of good construction, lacked one thing—a commodious parlor. The parlors were of the reception hall type: a Dutch hall with a partition separating the parlor. This plan made the parlor entirely too small for a family, and the owners of the homes often remarked about the reception-hall-parlor being an objection. So one morning the builder called upon one of the owners and he explained how at slight expense the wall separating the parlor and hall could be removed. With the wall or partition eliminated, all of the space taken by the hall would be included in the parlor, making an apartment spacious and comfortable.

Strange as it may seem to the reader, the owner of the house had never thought of the idea of eliminating the wall, and when the builder offered the suggestion the owner immediately recognized the advantages to be gained. The builder quoted a price for carrying out the improvement and he received the order. After the work had been completed with the parlor newly papered, the owner and his family were delighted over the change. Neighbors who occupied homes of the same style were invited in to see the transformation. The final result was a lot of additional business for the builder.

In the section where this builder lives are many two and three-story homes with front porches. With few exceptions the floors and steps of the porches are of wood. The weather soon causes rot and

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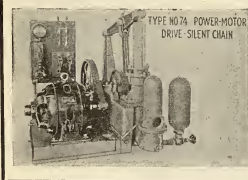
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decay, thereby necessitating frequent repairs. Whenever the builder notes in passing a house which needs porch repairing, he finds out the name of the owner and he writes the owner a letter, calling attention to the work required, and quoting a price for the work which is to stand for one week only. In numerous instances the builder receives quick response to the letters. He has gained a great deal of new business through this method.

When receiving an order to repair a porch, the builder always mentions to the owner the fact that concrete steps and flooring for a porch will last for a lifetime, where wood steps and flooring will last only for a few months without repairing. In not a few cases the owners are influenced by this advice. The builder has reconstructed many porches, constructing solid floors and steps of concrete. In several instances even the porch railings have been made of concrete. One of the recent orders was for porch floor and steps in concrete of a dark red color, with the railing of concrete in the natural color. The effect is

very pleasing.

Another one of this builder's specialties is making screens to order for homes of particular people. Some of the screens are of the full-length style with hinges. Others are of the sliding design, with either copper or steel netting. Hardwood is usually cut for the frames, finished in the natural color to match the wood-work in the houses. The builder has also made a large number of screens for porches. Whenever possible, the builder takes orders for the various kinds of screens late in the fall, and the work of making the frames and covering them is done during the winter months, in the builder's shop, when outside work could not be done to advantage.

Still another specialty of the builder referred to is making storm windows and doors for houses in the suburban sections. The windows are hinged to the sashes on the outside of the regular windows, and they are very efficient in keeping a house warm during extremely cold weather. The storm doors are for the same purpose.—*Robert F. Salade, in Building Age.*

It is this which has so clearly brought metal lath and cement stucco construction for exteriors, and metal lath and plaster work for interior partitions, walls and ceilings, into unusual prominence in emergency construction. The adaptability of metal lath to any style of architectural design in construction; its fire-resistive qualities; a perfect sanitation which is secured through the use of stucco exterior combined with metal lath reinforced cement floors; fireproof roof coverings and solid partitions, make a combination which is a close competition in cost to inflammable construction and which is much less expensive than other fire-resistive types.

The availability of lime and cement, gravel and sand, as well as metal lath, in practically all sections of the United States, and the difficulty of transportation for materials of other kinds, have also been determining factors in causing architects, engineers and contractors to use stucco for warehouse and private housing development work.

While few new methods of utilizing cement, patent stuccos and plasters and metal lath have been brought out during the past year, there are a number of points which have been checked up more carefully than heretofore and on which it is important that all have information.

For one thing, there has been in the past considerable controversy over the use or elimination of wood sheathing when stucco on metal lath is applied to wood stud construction. The investigations made by various independent groups, as well as by the Associated Metal Lath Manufacturers, have clearly shown that the use of metal lath applied direct to wood studs without sheathing, has been extensively and successfully adopted in residence construction throughout the New England States during the past 15 years, and that this method has always proven satisfactory in every way. If a building is located where wind stress may be considerable, a double cross bracing between studs may be used; but in New England it is common prac-

METAL LATH: ITS APPLICATION TO WAR NEEDS

So varied are the demands the Government is making upon architects, civil and construction engineers, and contractors, it is not surprising that these technical divisions of our commercial life are undergoing a metamorphosis process from many angles.

In the first place, the physical needs of the Government for men on the other side and in the handling and detail administration of the necessities of war and war production

have made such inroads upon the technical man-power, as well as upon the labor man-power, it is absolutely necessary that the professional and technical man, as well as the laborer, seek to devise new and simpler ways of handling construction work of every character, as only in this way can we succeed in securing the tremendous speed-up required by the emergency, and at the same time develop an efficiency which will insure economy.

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tice to use only one cross brace between studs on each floor.

The reports from owners and architects in the Eastern territory have shown that houses constructed in this way are amply insulated from both heat and cold, being cool in summer and requiring a minimum amount of fuel for heating in winter. It is also a fact that these houses never show dampness from condensation on the inside, and when plastered on the inside with metal lath and plaster there is practically no cracking, either exterior or interior, and thus re-decorating costs are reduced to a minimum, while it is, of course, not necessary to paint stucco in order to get an attractive effect, or to preserve it.

In fact, in the development of the Russell Sage Foundation residences at Forest Hills, L. I., the architects and engineers found that the slight initial cost for metal lath over other material was more than offset in a 10 to 12-year period by the saving in re-decorating and re-plastering, with the result that although largely stone and brick exteriors, every one of the hundreds of homes in this Forest Hills grouping have only metal lath and plaster partitions, ceiling and inner walls, and this Forest Hills development, where only beautiful and high-class homes can be erected, is undoubtedly the most beautiful and architecturally ideal building community settlement in the United States, if not in the world.

In the application of metal lath, either exterior or interior, only long staples (not less than $\frac{1}{2}$ -inch No. 14 gauge) should be used and these should be placed not over 6 inches apart, as the recent tests made at the Underwriters Laboratories at Chicago showed clearly that long staples would hold lath in place for a much longer period than the 1 or $1\frac{1}{4}$ -inch staples frequently used. Particularly is this true in ceiling construction. These tests at the Underwriters' Laboratories showed that metal lath and hard wall plaster panels erected on standard 2x4 studs, placed 16 inches on centers, would stand up perfectly under the 45-minute fire and water test; and on the second panel test these materials withstood fire ranging from 1,200 to 2,000 degrees Fahrenheit for 3 hours $1\frac{1}{2}$ minutes.

In applying metal lath to wood studs for stucco exterior, it is best to use lath weighing not less than 3.4 pounds per square yard and this weight lath should be placed on studs spaced 16 inches on centers. Lighter weight laths do not offer as rigid a type of construction for exterior work unless spacing of studs is changed. For interior construction the standard material weighing 2.5 pounds per square yard may be used on 16-inch stud spacing to good advantage.

The first sheet should be applied at the top of the wall for exterior construction, or at the juncture of the ceiling and side walls, and should extend at least 6 inches each way to prevent cracks appearing at the angle. On

the ceiling and side walls the edge of the last sheet applied should overlap the preceding sheet about $\frac{1}{4}$ inch and the edges should be wired at least once between all studs or joists to prevent the edges from separating when the plaster is applied. The sheet should be lapped around vertical corners at least one stud, with staggered end laps.

For interior wall and partition construction the 2-inch solid metal lath and plaster partition has become extremely popular. The 2-inch partition is sound-proof, proof against rats or vermin, and saves at least 3 inches of space per running foot in the interior of the room.

In stucco construction it is now deemed essential that the walls be back-plastered if no sheathing is used. This imbeds the lath in a concrete slab which forms the side wall and absolutely preserves the unit for an indefinite period.

Houses erected by Architect Frederick G. Sauer, in Pittsburgh, in 1891 and 1892, where the lath was imbedded in the stucco, have shown practically no checking or cracking; have never had to be painted or repaired in any way; and Mr. Sauer states that in making some recent changes on one of these buildings he found the lath to be in the same perfect condition as originally used 27 years ago. His experience there has definitely exploded the theory that Pittsburgh smoke conditions are detrimental to metal lath—although it should be noted that the essential feature of this construction was the complete imbedding of the lath, the same as is now secured by back-plastering.

When sheathing is eliminated, it is easily possible to place a film of roofing paper or tarred building paper on the inside before plastering the interior if the architect or owner have any doubt in their minds regarding the heat and moisture insulation offered by the 4-inch wall of back-plastered stucco.

In stucco houses or building construction of any kind, the contractor needs to be cautioned about the necessity for flashing at the eaves. Stucco houses should always be given the benefit of a wide overhanging protection where possible and when this style of architecture is used the copper flashing over the eaves will prevent the moisture from moving up into the concrete through capillary action and thus attacking the lath.

In solid composition or concrete floor construction, metal lath is used as a re-enforcing material to prevent cracking. Only light weight lath is necessary for this work.

Another recent use in connection with hollow tile wall construction has been suggested and used by Mr. Robert D. Kohn, architect of New York City. This is to cut the sheets of metal lath into strips the width of hollow tile and use these strips laid full width of wall between the rows of hollow tile blocks, securely tying the wall together and thus causing uniform action of stresses and pre-

venting uneven settlement and unsightly cracks in stucco on hollow tile or walls. This also saves considerable waste of mortar, which would otherwise drop into the tile and it speeds the masons' buttering-up to a considerable degree. In some recent tile construction of this character in Peckskill, New York, the contractor actually saved money in adding these metal lath strips, the saving in mortar and time much more than offsetting the slight cost for the metal lath strips.

From the investigations made by the Bureau of Standards, as recorded in United States Bureau of Standards Technologie Paper No. 70, it is also believed essential that the stucco mix for metal lath be at least as lean a mixture as 1 to 3, using 10 per cent. of hydrated lime with the first and second coat and a reasonable amount of hair with the first coat. Panel No. 15—one of a series on metal lath in their tests—has now stood service for three years without any cracks of any kind appearing in the panel, not even the hair cracks which are frequently found in stucco work.—Zenias W. Carter, in the "National Builder."

SCOTTISH HOUSING PROGRAM.

The Royal Commission on Housing in Scotland, whose report was published last fall, estimated the existing shortage of houses, on the basis of not more than three persons to a room (an excess of that number being regarded as overcrowding), at 121,000 houses. A subsequent inquiry carried out by the Local Government Board for Scotland through the local authorities—municipal corporations—shows a deficiency of at least 109,000 houses. If, as held by the Royal Commission, overcrowding should be estimated not at over three persons to a room but at over two persons, and if this higher standard be adopted in providing houses, the new accommodation required will represent between 225,000 and 240,000 houses.

The local authorities that have in the past taken up the task of endeavoring to house the industrial population have found, almost without exception, that their schemes involved a loss, small or great, which fell upon the taxpayers; and as building costs are at present from 70 to 1000 per cent. higher than they were in pre-war years and will doubtless remain high for some years to come, the housing problem is considered to be too difficult for either private enterprise or the local authorities to solve. State assistance in the provision of houses being regarded as absolutely necessary, the Scottish Local Government Board, after consultation with the Cabinet and the Treasury, has come forward with a proposal for financially assisting local authorities during the period immediately following the war.

The State guaranty takes the form of at least 75 per cent. of the loss, if any, incurred

by local authorities. Assistance will be given in two ways, the one succeeding the other. For a period of years, not less than seven, following the initiating of local programs, the Treasury undertakes to pay 75 per cent. of any approved annual deficit. At the end of that period a valuation of the property is to be made, and the State will then assume responsibility for 75 per cent. of any excess in the amount of the outstanding capital charges over the then value of the property. The local authorities must hold themselves responsible for the remaining 25 per cent. of any loss; but in exceptional cases, where the ratable value of the local authority is low, the Treasury may extend its assistance beyond the three-quarters which will be the normal subsidy.

All housing schemes proposed by local authorities must be approved by the Local Government Board before qualifying for State assistance; but a considerable amount of latitude will be allowed to such authorities in regard to types of houses, the only conditions stated being that not more than 12 houses should be placed on an acre of land and that each should have at least three apartments.—“National Builder.”

HOW TO BUILD A MODERN FIREPLACE.

The open brick or tile fireplace is the style now in vogue. Its advantages are so great that but few homes are built without at least one such fireplace. With a properly built fireplace, enough heat can be obtained at a small fuel cost to keep a house comfortable, except in the coldest weather, and then it is a good auxiliary to some other heating system. It gives perfect ventilation. It is the “social center” of the home.

All this is true only where the proper principles of fireplace construction and right equipment are used by the architect and contractor. No cheapening in first cost will ever compensate for a smoky fireplace or one that cannot be conveniently regulated, does not thoroughly utilize the heat in the fuel, or wear well. The tearing down of a fireplace once built is too expensive to experiment with cheap material.

The following rules are the result of the practical experience of the best architects and fireplace contractors. By following all of them, satisfactory results will always be obtained.

1. Make front opening of fireplace wider than high; about 4 to 3 is best.
2. Make depth about one-half the front width, but not less than 14 or 15 inches, even in the smallest fireplaces.
3. Have the width at the rear about two-thirds that of the front. This proportion should be greater on the larger fireplaces.
4. Slant upper part of back wall forward to meet the damper frame so as to carry the

flames forward. The arrangement of the back and side walls in this way will greatly increase the heating effect of the fireplace.

5. The clear area of the inside of the flue should be from one-tenth to one-eighth of the front opening of the fireplace, and the chimney should be run high enough above surrounding obstruction to prevent down draft. Down draft can also be prevented, largely, by proper cap stone.

6. The throat should extend the full width of the fireplace and the walls drawn in equally from both sides to meet the flue. If the flue must be off the center, deflect it above the throat, or the fire will not draw evenly from both sides.

In certain parts of the country contractors and architects are not specifying fireplace dampers in their plans and do not realize the importance of this mistake.

The object of the damper is—first, to regulate the draft and thereby govern the intensity of the fire; second, to entirely close off the opening in the flue when the fireplace is not in use. Where a damper is not used, there is no satisfactory way of checking the fire and getting the greatest value out of the fuel used. Also, where a damper is not used, people resort to crude methods of closing up the flue, such as stuffing old paper up the flue. Where something of this kind is not done, bats, bugs, rain, and wind get into the building and heat escapes when it is most needed inside.

No doubt some contractors and architects leave out fireplace dampers with the object of showing a low construction cost; but a good fireplace damper will cut down the time of the contractor in installing the fireplace and will result in a much more satisfactory fireplace from the standpoint of the person who is to use it when the house is built.—“National Builder.”

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

The Page “Ad”

“I like the clean, outstanding appeal of the page ad,” said an advertiser recently, “but I’ll be frank to say that I’ve never been able to convince myself that it can be made to pay.”

“Have you ever tried out a whole page?” he was asked.

No. He hadn’t. But he knew what a page of space would cost, and he couldn’t get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker’s case was quite different.

We asked him to point out “how” and “why.”

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn’t be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is “right” and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

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Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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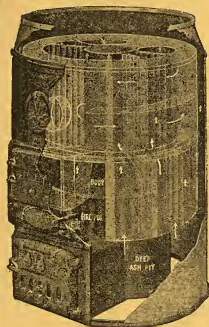
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Vol. XXXIII., No. 43
October 23, 1918

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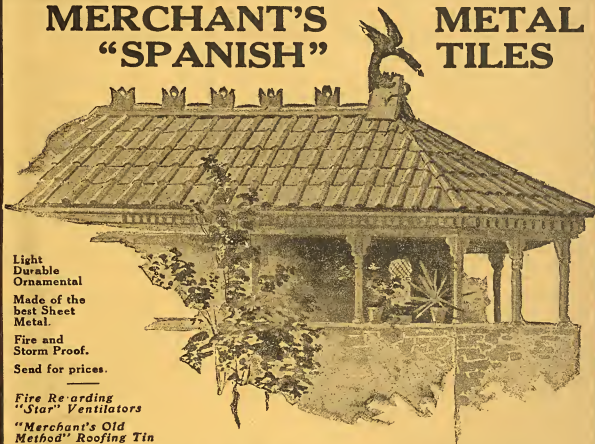


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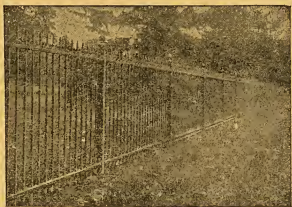
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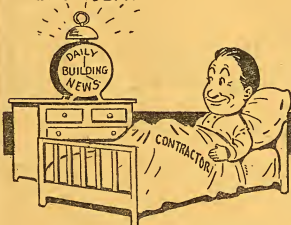
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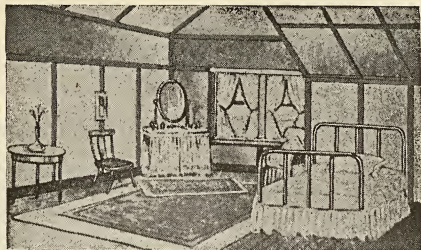
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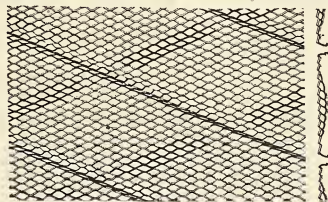
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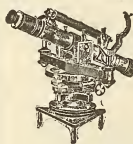
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Devoted to the Advancement of American Architecture, Structural
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VOLUME XXXIII
Number 43

PHILADELPHIA
October 23, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

PUBLISHED BY

Building News Publishing Company, Inc.

PERRY BUILDING, PHILADELPHIA

Washington Office, McLachlen Bank Bldg.

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Second Class Matter



As The Editor Sees It



WE are constantly reminded of the serious problem confronting us, in the existing shortage in workmen's homes. We need go no further than our own city to see a striking illustration of the havoc which this situation is creating. In Tacony the shortage of houses became so acute several months ago that a housing war resulted between several firms affected by the lack of houses for their employees. Many transactions designated to avoid giving information to others have been carried on. First, one firm bought a row of houses, occupied by workmen of a second concern, the employees therein were evicted and so the fight was on, each concern trying to outdo the other. The seriousness of the situation is fully appreciated by the Federal authorities, who realize that war work is likely to suffer as a result, and investigation of the housing commission, to affect a remedy is being conducted by John Ihlder.

Investigation and remedy in these cases, however, take time, and at present, every minute is precious. Furthermore, such conditions cause unrest and dissatisfaction among employees, thus detracting from their efficiency.

The problem, however, is so big, so many-sided that it cannot be solved, in any instance, at once. All points of view and the possibility of new conditions arising, must be taken into consideration.

Some of the difficulties incident to the war housing situation are cited by Leo Day Woodworth, Secretary, advisory council of, Real Estate Interests, New

York, writing in "Realty" on "War Housing, now and in the Future."

"I Have been criticised for pointing out some of the practical difficulties in administering the housing policies of the Government, especially in choosing between temporary and permanent construction and also in planning for the disposition of the properties otherwise than to the individual occupants. It was our conclusion that the novel (for this country) proposal for fostering 'self-owning tokens' carried inherent practical difficulties which had been overlooked.

"However, as our points have not been directly controverted it is worth noting that those in charge of our large Federal building fund now are practical men who seem to recognize the clear distinction between emergency housing as an incident to war work and the permanent towns for which self-ownership is desired by persons who do not have to live in them. War housing is being developed along practical lines by those responsible for results and it stands to reason that much of this construction which is needed for immediate occupancy should be of permanent character as far as we can foresee the needs in each locality after the war. We are referred so often to foreign experience that it may not be amiss to give the latest data which has reached us from England.

"In 1913 the Prime Minister estimated the shortage of cottages to be over 100,000 and the secretary of a town-planning association has estimated an increase in this shortage of 75,000 per annum. The

latest statistics as to the actual expenditures in housing in Great Britain are of March 31, 1917, but are just available through the U. S. Bureau of Labor Statistics. These show total expenditures under the Act of 1890 and more recent laws to total only \$28,000,000, of which over half was by the Ministry of Munitions for war housing. About one-third (\$5,295,564.71) by the Munitions Minister was for temporary housing of 19,565 workers.

"Where this emergency housing was located in isolated districts, the buildings have been fully occupied whereas in other cases the occupancy is as low as 31 per cent. and the total occupancy in April, 1917, was 56 per cent. of the total accommodations and therefore the income in rents has not been sufficient to meet capital charges, interest and maintenance. This high percentage of vacancy of war housing in the face of the general shortage of workmen's dwellings, is indicative of the great difficulties which the administration must face, and also of the probability of error of judgment, in locating and erecting such dwellings.

"At the Woolwich Arsenal, 1,298 dwellings were provided at an average cost of \$3,221 each, including cost of land, roads, sewers and fences—but the cost of land was only five per cent. of this total. Labor constituted sixty per cent. of construction cost, whereas it was normally forty per cent. in England. It is estimated that 30 per cent. must be considered a profitable economic venture but the property will be reappraised before

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being turned over to the public utility society with limited dividends which will rent and not sell the houses, after the war.

"A further side-light on English labor costs and rental conditions generally may be had by reference to the fact that the average weekly wages of the men workers are \$11.76 and of women \$8.29. This construction was under the cost-plus system, but with more restrictions than have been adopted in this country.

"These facts are interesting in themselves as indicative of the huge expenditures involved in similar undertakings in this country, also the difficulty of determining actual needs of established localities and the very real possibility that there will be another large shifting of workers for the new industries of peace. The wastage or shrinkage in such cases cannot be estimated by the mere difference of building costs. Herein do we find the reasons for loss to the general taxpayers rather than in the fact that construction is well planned and well executed. The value of the property will not be saved by forecastings, common ownership or co-operative management if we may refer to past experience along those lines. Much was said about the value of co-operative credit associations in foreign countries but the failure of the plan when transplanted to this country by the Federal Farm Loan Act is generally recognized, and yet in the case of rural credits we deal with a class of workers who are far more permanently located than are our munition workers.

"Another point which relates to this discussion of disposition of housing facilities after the war, is as to the presumption of industrial reaction. A large plant is erected in an isolated section. It cannot provide work to retain its labor supply. The plant without the housing facilities would be worthless and therefore the housing facilities must be maintained in order to conserve the value of the industrial property. Yet company houses are looked upon with disfavor in England and even more so in this country. Can we expect co-operating residents to maintain property which becomes vacant after industry departs, or will the English style of public service societies pay for deficits when their limited dividends are not earned, or must the housing facilities become part of the plant? As a last resort, will Government ownership be necessary?

"These are a few of the points which cannot be lost sight of when any permanent policy is being framed and no prudent person would ignore them even when providing the all-important housing which is a necessary incident to our war activities. However, they are points to which our attention is not called by the

advocates of land nationalization through the taxation of land values, or by those advocates of improved housing who plunge ahead regardless of the habits and prejudices of the workers and without care as to the expense to the general taxpayer or even to the details of administration."

* * *

WORK which is already under way in Philadelphia and vicinity, to house the Emergency Fleet Employees, all of which is of a permanent character and has been designed by leading architects of the country consist of:

- At Bristol, 208 houses, 24 apartments, 42 bunk-houses and 14 boarding houses.
- At Camden, 2,007 houses.
- At Gloucester, 550 houses.
- For Hog Island, 1,460 houses and 4 dormitories.

- At Essington, 200 houses and 1 dormitory.

- At North Cester, 622 houses.

- At South Chester, 277 houses, 1 dormitory and 23 apartment houses.

- At Wilmington, 506 houses and 3 apartment houses.

* * *

A FEW more suggestions for the builders who are anxious to be busy during the winter months, despite the restrictions of the Government, are offered by Bricks and Mortar in "Building Age."

"Well, Jones, what preparations are you making for winter business?" asked Jameson, traveling salesman for a big material concern, as he swung into the shop. "The first touch of autumn cold will soon be here. Are you making plans for getting some of the business that approaching winter generally brings?"

"I haven't really thought anything about it, Jameson," admitted Jones. "You see things around here have always been pretty dull in winter. What with this war and all, I don't see that there is going to be much of a chance for me to do anything."

"There are mighty few men in any line of business who are always on their toes looking for more business. Remember one big factor that makes for success in any business; that is, that there is always some business to be had. It may be lying dormant, apparently dead. But the man who goes out and stirs things up is bound to find some activity. It may be an entirely new line of work that must be developed; it may be a demand that nobody else in town has attempted to satisfy. Find that line or lines and work them to the limit."

"Take some of these specialties that are on the market now, vacuum cleaners, for instance. Do you realize that when the first one was put on the market, no-

body knew anything about it or wanted to buy one? Now, not only is the portable vacuum cleaner no longer a rarity, but some progressive builders, catering to a high class, install a vacuum cleaning system in many of the houses they build.

"There are so many instances like that that you need not hesitate a minute to introduce some new fad here in your town. All you have to do is to work out your idea from every angle. And then go after the people who you know are good prospects for your idea.

"There's one idea worth remembering in connection with getting orders for such work. Start with the biggest and most influential prospect on your list. If you land him, and you will if you work it right, it will be easier to land the smaller fry.

"Another thing. If you want to sell any idea that helps domestic efficiency, try the woman of the house first. Don't try to sell her the idea alone; describe the idea to her in a way that will picture her using it.

"A salesman selling an expensive household convenience used this idea to perfection. Closing his demonstration he not only pictured the labor-saving features but wound up with, 'My dear Mrs. Blank, I am not trying to sell you a vacuum cleaner. What I am doing is to offer you an extra hour each day, an extra hour that will enable you to get off early to the movies on Wednesday, that will enable you to enjoy the little pleasures now denied you by the care of your household duties. Think of what that will mean to you for the rest of your life!'

"Such arguments as that in selling any time- or labor-saving idea are worth while. For instance, if you try to sell the idea of a china closet built into the partition between living room and Kitchen, opening into both rooms, picture the housewife as using it. Show how she can put soiled dishes in at the dining room side, take them out on the kitchen side, wash and dry them, and then place them back in the china closet without moving from the kitchen sink. What with the scarcity of help, many a well-to-do housewife would be glad to receive such a suggestion.

"Now is the time of the year when you can sell weather-stripping to good advantage. Many homeowners who burned ten tons of coal last year find themselves forced to enter upon the coming winter with seven tons or less. By going to such people, pointing out the fuel saving effected by weather stripping and showing them that they can save two or three tons by weather stripping or double windows you will have little difficulty in

(Continued on Page 592.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residences (275), Cottman street and Frankford avenue, Philadelphia. Architect, private plans. Owners, U. S. Housing Corp., Bureau of Industrial Housing and Transportation, Otto Eidlitz, Director, 613 G street, Washington, D. C. Brick, two stories, slag roof, electric lighting. Owners ready for bids.

Shelter Building, McCosh Playground, Seventeenth and Fitzwater streets. Architect, private plans. Owners, City of Philadelphia, Board of Recreation, 587 City Hall. Frame, 12x28 feet, 10 feet high, rubberoid roof, cement and wood floors, plumbing, hardware, mill work. Owners taking bids, due October 28th at noon.

Hangar and Runway, Spec. 3463, Philadelphia, Pa. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans completed. Owners are ready for bids.

Cooking School, Spec. 3465, U. S. Naval Home, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story. Office Building, 35x22 feet; Cooking School, 48x55 feet; Wash House, 80x24 feet, ready roof, steam heating, electric lighting, cement and pine floors, ventilators. Lowest bidder, Charles Gilpin, Harrison Building, \$28,996, 50 days.

Toilet Room in Special Ammunition Store House, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Frame, 1 story, 48 feet 3 inches x20 feet, rolled steel sash, painting, plumbing and hardware. Owners taking bids. F. W. Mark Cont. Co., Finance Building, is figuring.

Residences (240), Tacony, Philadelphia. Architect, private plans. Owner, H. L. Harris (promoter), Detroit, Mich. Brick, 2 stories, 16x31 feet, airtite, slag roof, concrete foundations, hot water or hot air heating, electric lighting, pine floors. Thos. Duff, 4666 Wyoming avenue, Frankford, Philadelphia, is taking sub-bids on all lines.

Lumber Shed and Stable, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Steel, reinforced concrete, brick, terra cotta coping, granite, 1½ stories, 100x150 feet, and 2½ stories, 65x36 feet, slate, slag and cement tile roof, cement, maple and wood block floors, hollow tile, metal lath, electric elevators, carborundum treads, roof ventilators, concrete foundations, rolled steel sash and skylights, fire doors, kalamein doors and trim, steel plate and steel floors, wire work. Low bidders: Wark & Co., 1737 Filbert street, Philadelphia, stable, \$19,000; John M. Yardley, 1716 Sansom street, lumber shed, \$39,000.

phila, \$2,400. Architect, private plans. Owners, Morris Realty Co., 122 South Thirteenth street, Philadelphia. Brick, side addition, 2 stories, 10x12 feet, partitions, stairways, hot water heating, plumbing, second story balcony. Contract awarded to John McCoy, 1215 Summer street, Philadelphia.

Store, 4522-24 Lancaster avenue, Philadelphia, \$2,000. Architect, private plans. Owner, George Percy, Bourse Building, Philadelphia. Fire repairs, brick work, slag roof, electric work. Contract awarded to Mitchell Bros., 2125 Race street, Philadelphia.

Store (alts), 38 and 40 South Fifty-second street, Philadelphia, \$1,850. Architect, Henry L. Reinhold, 1309 Walnut street, Philadelphia. Owners, Louis & Julius Winkelman, on premises. Metal bulks, tile and marble work, iron work. Contract awarded to Basch & Co., 1610 South Front street, Philadelphia.

Tenement House, 4200 Parkside avenue, \$2,100. Architect, Samuel D. Milner, 1117 Foulk-rood street, Philadelphia. Owner, E. Baratz, 32 Broom street, Brooklyn, N. Y. Changing old partitions, new partitions, 4-story fire tower, brick, 10x13 feet. Contract awarded to Philip Crown, Forty-second and Parkside avenue.

Coal and Ash Handling Equipment, Midvale Plant, Nicetown, Philadelphia, \$35,000. Architect, private plans. Owners, Midvale Steel Corp., Widener Building, Philadelphia. Steel bunkers, corrugated J. asbestos sidings, ash bunker, 10 feet diameter, concrete lined. Contract awarded to R. H. Beaumont Co., Drexel Building, Philadelphia.

Manufacturing Building, Ridge avenue and Calumet street, \$6,000. Architect, private plans. Owners, Powers, Weightman & Rosengarten, Ninth and Parrish streets. Brick, 2 stories, 40x28 feet, stone foundations, slag roof, cement floors, electric lighting. Contract awarded to R. C. Ballinger & Co., 218 N. Thirteenth street.

Garage, 6828 Anderson avenue, Philadelphia, \$3,400. Architect, Amos W. Barnes, Wissahickon, Philadelphia. Owner, Richard L. Wallace, 6828 Anderson avenue. Stone, 1 story, stone foundations, 22x30 feet, slag roof. Contract awarded to George Godshall, 6625 Ross street, Philadelphia.

Storage Building, 2410 Richmond street, Philadelphia, \$600. Architect, private plans. Owners, Joseph Hunters' Sons, 2410 Richmond street. Brick, 1 story, 17x20 feet, slag roof, skylights. Contract awarded to Willard Myers, 2135 East Fifth street.

Manufacturing Building, northeast corner of York and East Thompson streets, \$750. Architect, private plans. Owners, Charles F. Datz Co., 482 North Fifth street, Philadelphia. Brick and cement repairs. Contract awarded to Henry MacMillan, Eighteenth and Thorps Lane.

Chimney, Walnut Lane, east of Main street, \$3,100. Architect, private plans. Owners, J. G. Littlewood & Sons, Ltd., Main street and

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Cafeteria, Tacony, Philadelphia, \$25,000. Architects, Austin Co., Bulletin Building, Philadelphia. Owners, Henry Disston Sons Co., Tacony, Philadelphia. Brick, 1 story, 161½x61½ feet and 60x81½ feet, slag and asbestos shingle roof, cement and composition floors, rolled steel sash, concrete foundations. Contract awarded to Austin Co., Bulletin Building, Philadelphia.

Sand House, Delaware avenue and Washington avenue, \$5,500. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Stucco on metal lath, 1 story, 15 feet 4 inches x47½ feet and 2 stories, 7x32 feet, slag roof. Owners will build.

Dwelling, 432 Lyceum avenue, Philadelphia, \$2,000. Architect, private plans. Owner, Frank A. Wilkinson, 432 Lyceum avenue, Philadelphia. Brick, 1 story addition, 8x16½ feet, stone foundations, tin roof. Contract awarded to F. E. Wallace, 1220 Chancellor street.

Storage Buildings (2), "C" and Ontario streets, \$5,000. Architect, private plans. Owners, Philadelphia Electric Storage Battery Co., on premises. Iron on iron, 1 story, 40x118 feet and 30x40 feet. Contract awarded to F. & E. Aubel, 2503 Germantown avenue.

Stable, Frankford Arsenal, Philadelphia, Philadelphia, \$19,000. Architect, private plans. Owners, U. S. Government, care of Major Huckendorn, Frankford Arsenal. Steel, reinforced concrete and brick, 2½ stories, 65x36 feet, slag roof, cement and wood block floors, hollow tile, metal lath, roof ventilators, concrete foundations, rolled steel sash and skylights, wire work. Contract awarded to Wark & Co., 1737 Filbert street, Philadelphia.

Dye House Finishing Room, 2631 North Third street, \$2,500. Architect, private plans. Owners, R. & A. J. Gilmour, Inc., 2631 North Third street, Philadelphia. Iron on iron, 1 story, 17x39 feet, slag roof. Contract awarded to Stewart Bros., 2526 North Orkney street. Apartments, 537 Brinton street, Philadel-

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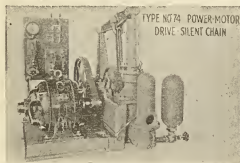
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Walnut Lane. Radial brick, 4½ feet diameter, 100 feet high. Contract awarded to H. R. Heinicke, Inc., 21 South Twelfth street.

Boiler Room and Toilets, Allegheny avenue, east of Germantown avenue, \$2,000. Architect, private plans. Owners, Atlantic Refining Co., 3144 Passyunk avenue. Brick, 1 story, 18x20 feet, concrete foundations, slag roof, cement floors, roof ventilators. Contract awarded to Metzger & Fisher, Otis Building.

Office, Locker, Wash Room and Toilet add. of Blacksmith Shop, Cramp's Shipyard, Philadelphia. Architect, private plans. Owners, Wm. Cramp & Sons S. and E. Building Co., Richmond and Norris streets, Philadelphia. Miscellaneous alterations and repairs. Contract awarded to Willard Myers, 2135 East

Firth street.

Office Building (add.), 1726-28 Ludlow street, Philadelphia. Architect, private plans. Owners, Frank P. Mellon Estate, Middle City Building, Philadelphia. Brick, 2 additional stories, 73x36 feet, cement and pine floors, electric lighting, metal lath (heating reserved). Contract awarded to George C. Dougherty, 1725 Ludlow street, Philadelphia.

School (alts.), Ninth and Locust streets, Philadelphia, \$3,000. Architect, Walter F. Price, 714 Walnut street, Philadelphia. Owners, Beneset School, Ninth and Locust streets, Philadelphia. General repairs, new vapor steam heating system. Contract awarded to S. E. Brown, 18 South Seventh street, Philadelphia.

PENNSYLVANIA Construction News

Farm House (alts. and add.), Terwood, Montgomery Co., Pa. Architect, Francis G. Caldwell, Stephen Girard Building, Philadelphia. Owner, George J. Campbell, on premises. Frame, 2½ stories, 19x26 feet, slate roof, oak floors, electric lighting, tile work (heating reserved). Architect taking bids, due as soon as possible. Specht & Sperry, Heed Building, Philadelphia; Fesmire Bros., Willow Grove, Pa., and Howard S. Amey, Ambler, Pa., are figuring.

Men's Building, Primos, Delaware County, Pa. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Primos Chemical Co., Primos, Pa. Frame, 1 story, 72 feet 11 inches x24 feet, tin shingle roof, cement floor, slate work. Architects taking revised bids, due October 23rd. H. E. Grau Co., 1707 Sansom street, Philadelphia, is figuring.

Residences (240), Section No. 1, Eddystone, Pa. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Dept. of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Brick or hollow tile and stucco, 2 stories, 16x30 feet, slate

roof (steam central heating plant), electric lighting. Architects about ready for bids.

Residences (200), Section No. 2, Eddystone, Pa. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Dept. of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Brick or hollow tile and stucco, 2 stories, 16x30 feet, slate roof, steam central plant. Plans nearing completion.

Dormitories (6) and Cafeteria, Eddystone, Pa. Architect, private plans. Owners, U. S. Dept. of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Frame, 2 stories, 14x28 feet, slate roof, yellow pine floors, electric lighting. Architects taking bids, due October 25th at 3 P. M. F. G. Stewart, 1019 Sansom street, and Doyle & Co., 1519 Sansom street; Edward Fay & Son, 2 South Mole street; Wm. Steel & Sons Co., Sixteenth and Parkway; George F. Pawling & Co., 1432 South Penn Square, are figuring.

The impractical dreamers are not the architects, but the clients themselves, as a rule.

New Jersey Construction News

Magazine Building and Rowing School (Completion), Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of Commandant's Office, Twelfth and Chestnut streets, Philadelphia. Concrete. Magazine Building, 1 story, 35x14 feet; Rowing School, concrete, 35x182 feet, asbestos shingle roof, concrete, asphalt and mastic floors, steel doors, roof ventilators. Lowest bidders: Wark & Co., 1737 Filbert street, Rowing School, \$5,615, 40 days; W. Beaumont, Atlantic City, N. J., Magazine Building, \$2,900.

Office Building and Machine Shop, Blenheim, N. J. Architect, H. Lewis Shay, 130 South Fifteenth street, Philadelphia. Owners, Simplex Valve and Meter Co., Blenheim, N. J. Steel, cement blocks and granite, 2 stories, 74 feet 8 inches x42 feet, 150x42 feet, J-M asbestos roof, cement and yellow pine floors, metal lath, rolled steel sash and skylights, concrete foundations, steam heating, roof ventilators, dampproofing (electric lighting reserved). Architect taking bids. John M. Yardley, 1716 Sansom street, Philadelphia, is figuring.

Theatre, Atlantic City, N. J. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Globe Theatre, Atlantic City, N. J. Consists of general interior alterations. Plans in progress.

Section Base, Coal and Oil Pier, Spec. 3560, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress. Will be ready for bids in about one month.

Machine Shop, Thorn and Copewood streets, Camden, N. J. Architects, Peuckert & Wunder, 319 Chestnut street, Philadelphia. Owners, Eastern Machinery and Equipment Co., on premises. Brick and reinforced concrete, 1 story, 45x112 feet, slag roof, concrete or stone foundations, cement, maple and pine floors, rolled steel sash, ornamental iron work, wire work. Architects have received revised bids.

Hospital, Municipal Colony, Trenton, N. J. Architect, Wm. Klemann, First National Bank

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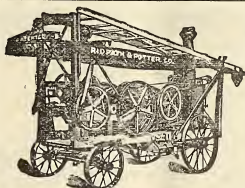
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Building, Trenton, N. J. Owners, City of Trenton, care of Mayor F. W. Donnelly, City Hall, Trenton, N. J. Brick, 1 story, 40x80 feet, slate roof, stone foundations, vacuum heating, electric lighting, tile and marble work, concrete floors, hollow tile. Owners taking bids, due October 25th. S. W. Mather & Sons, I. Harper Clayton, Burton & Burton, Charles Randall, Charles J. Smith, Fred Parker, J. H. Morris, C. Y. Barlow, Thomas Day, Ed. La Rue, Harry Hilton, all of Trenton, N. J., are figuring.

Generator and Purifier House, Camden, N. J., \$60,000. Architect, private plans. Owners, Public Service Gas Co., Camden, N. J. Brick, steel and concrete, 2 stories, 35x78 feet and 39x135 feet slag and corrugated iron roof, cement floors, electric lighting, mill work,



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sliding metal doors, fire escapes, structural iron work. Contract awarded to Mockett Const. Co., Sixth and Market streets, Camden, N. J., who are taking sub-bids in all lines.

steel, concrete foundations on piles, 2 stories, 38x46 feet.

Store, southeast corner of Twenty-third and Fairmount avenue, \$1,500. Joseph Spigel (O), 2244 Fairmount avenue. A. Sieminski (C), 1634 Ruffner street. Two flush bulk windows, brick.

Kitchen, 1318 South Seventh street, \$300. Luigi Parisi (O), 1318 South Seventh street. Tony Alessi (C), 641 Reed street. Brick, 1 story, 14x10 feet, stone foundations.

Kitchen, 344-46 South street, \$300. Thos. Garrity (O and C), 910 South Broad street. Brick addition, 6x15 feet, slag roof.

Store Building, 532 Lombard street, \$450. H. Perilstein (O), 532 Lombard street. Sam Rosenberg (C), 612 Tasker street. Brick addition, 18x38 feet, stone foundations.

Factory, Crawford street, east of Ridge avenue, \$2,300. J. & J. Dobson, Inc. (O and C), on premises. Two 15,000 gallon tanks and brick support, raise fire tower wall 20 feet.

Residence, southeast corner of Ninth and Diamond streets, \$300. Elizabeth Henderson (O), Manheim and Green streets. C. F. Schröder (C), 2408 North Broad street. New marble steps and base.

Rooming House, 1137 Lombard street, \$900. Albert Branch (O), 1137 Lombard street. Frederick Shroglia (C), 703 South Tenth st. Rear brick addition, 18x7 feet, slag roof, new bath.

Chimney, Walnut Lane, east of Main street, \$3,105. J. G. Littlewood & Sons, Ltd. (O), Main and Walnut Lane. H. R. Reinicke, Inc. (C), Stephen Girard Building. Brick, 4½ feet in diameter, 100 feet high, concrete foundations.

Dwelling, 1233-35 Christian street, \$400. M. Haller (O), 2133 South Fourth street. Harry Hamtman (C), 2402 South Fourth street. New front.

Dwelling and Office, southeast corner of Nineteenth and Girard avenue, \$921. John Minnick (O), 1902 Girard avenue. Chas. A. Carr (C), northwest corner of Twentieth and Ogden streets. Office partitions, raise floor in kitchen.

Boiler Room and Toilets, Allegheny avenue, east of Germantown avenue, \$2,000. Atlantic Refining Co. (O), 3144 Passyunk avenue. Metzger & Fisher (C), Otis Building. Brick, 1 story, 18x20 feet, slag roof, cement floors, ventilators.

Moving Picture Theatre, 743 South Third street, \$1,000. S. Morris (O), on premises. S. E. Brown Heating Co. (C), 18 South Sev-

Miscellaneous Construction News

Dormitories and Community Buildings (48), Twenty-first to Twenty-third and B streets, Washington, D. C., \$3,000,000. Architect, Waddy B. Wood, 816 Connecticut avenue, N. W., Washington. Owners, Bureau of Industrial Housing and Transportation, Otto Eidlitz, Director, 613 G street, Washington, D. C. Hollow tile, 3 stories, various sizes, slate and slag roof, slate toilet partitions, central plant steam heating. Contract awarded to Moss Taylor & Crawford, Fifty-eighth and Girard avenue, Philadelphia.

Warehouse and 4 Ways, Fairfield, Anne Arundel Shore, Baltimore, Md., \$150,000. Architect, private plans. Owners, Union Shipbuilding Co., Baltimore, Md. Warehouse, brick and steel, 1 story, 80x260 feet, slag roof, wood floors, rolled steel sash (heating and electric lighting reserved). Ways, regulation. Contract awarded to Hughes-Foulkrod Co., Commonwealth Building, Philadelphia.

PERMITS FOR

Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Store, south side of Fitzwater street, west of Fourth street, \$2,500. M. Frank (O), 439 Fitzwater street. A. Shestack (C), 528 Reed street. Three-story new party wall and driveway.

Storage Building, 2136 Leithgow street, \$700. J. F. Kirn (O), 2137 North Lawrence street. Otto Maltz (C), 2108 North Lawrence street. Brick, 1 story, 16x17 feet.

Garage, Twenty-fifth and Delancy streets, \$2,500. Henderson & Bro., Inc. (O), Twenty-fifth and Delancy streets. J. H. Hinkle & Co., Inc. (C), Hutchinson and Venango sts. Brick, 1 story, 72x25 feet.

Dwelling, 5033 Chestnut street, \$555. Wm. B. Griffith (O), 5033 Chester avenue. James Spear Co. (C), 1823 Market street. New warm air heater.

Office Building, 419 Walnut street, \$2,000. United Firemen's Insurance Co. (O), Third and Walnut streets. E. H. Keefer & Son (C),

1321 Rodman street. Take out partitions and alter skylight.

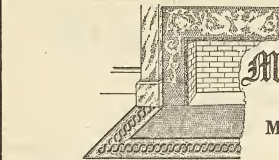
Stack, southeast corner of State Road and Robbins street, \$2,000. Commercial Products Co. (O), State Road and Robbins street. Anton Ahlers (C), 3425 Howell street. Brick, 60 feet high, concrete base.

Warehouse and Machine Shop, 495 North Third street, \$500. Richard L. Binder (O and C), 495 North Third street. Reinforced concrete alterations.

Tenement House, 4200 Parkside avenue, \$2,100. Eva Baratz (O), 32 Broom street, Brooklyn, N. Y. Philip Crown (C), Forty-second and Parkside avenue. New partitions and changing old partitions, four-story fire tower, brick, 10x13 feet.

Boiler House, Morris street, east of Delaware avenue, \$20,000. Baugh & Sons Co. (O), 20 South Delaware avenue. Baugh & Sons Co. (C), 20 South Delaware avenue. Brick and

If you want Trap Rock or Slag, any size or grit, we are headquarters for same. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.



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Manufacturers and Dealers in
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Soundings**

JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.

7x32 feet. Concrete foundation, steel frame, stucco finish on metal lath, slag roof.

AS THE EDITOR SEES IT.

(Continued from Page 588.)

securing an order. But always quote the price of the finished job.

"Many people who cannot be convinced of the value of weather strips will be readily converted to the idea of double windows, detachable for the summer time. Most people have heard of them and know something of their value in fuel conservation.

"Whenever you sell a person an idea that will save fuel, it is advisable to go a step beyond your job and see that the saving is probable by the way in which the furnace is fired. Make sure that the heating apparatus is in good shape and that the owner knows how to operate it to good advantage. If any repairs are necessary or some efficiency device, such as a temperature regulator is advisable, suggest the necessity for the work. If you can't do it yourself, recommend some heating man who knows how to do a good job. He'll probably be glad to give you a commission on new work like this if you take up the matter with him.

"Another good idea is to seek jobs for building storm doors for these colonial houses which have no porch. Storm doors like this should always be designed so as to harmonize with the appearance of the doorway and the house in general. They should be built in handy sections, screwed together. Thus the householder can put it up and take it down all by himself.

"In selling this idea, you might picture the opening of the door for friends who come in covered with snow, removing rubbers in the shelter afforded by the storm entrance, and then entering the house with no soiling of rugs. A housewife always looks ruefully at the muddy tracks left on her floor by the visitors in stormy weather.

"Then you can picture the elimination of chilling the house off by a front door left open while visitors shake off snow before coming in, or a last-minute conversation before leaving.

"Many small repairs will be suggested by your past experience. Think up every possible method of getting new business,

enth street. Install low pressure heating boiler.

School, south side of Locust street, east of Ninth street, \$3,000. Beneset School (O), on premises. S. E. Brown Heating Co. (C), 18 South Seventh street. Install vapor steam heating system.

Kitchen, 909 Cross street, \$300. G. Cirenotto (O and C), 909 Cross street. Rear brick addition, 10x10 feet 8 inches, slag roof.

Residence, west side of Ardleigh street, north of Mt. Pleasant avenue, \$300. A. S. Tourison (O), 7014 Boyer street. A. S. Tourison, Jr. (C), 7014 Boyer street. Chimney and interior alterations.

Manufacturing Building, northeast corner of York and East Thompson streets, \$750. has. F. Datz Co. (O), 482 North Fifth street. Henry MacMillan (C), Eighteenth and Thorp's Lane. Brick and cement repairs.

Garage, 6828 Anderson avenue, \$1,400. Richard L. Wallace (O), on premises. Geo. Godshall (C), 6625 Ross street. Stone, 1 story, 22x30 feet, slate roof, stone foundations.

Auto Storage, 2410 Richmond street, \$600. Joseph Hunters' Sons (O), 2410 Richmond street. Willard Myers (C), 2000 East Cambria street. Brick, 1 story, 17x20 feet, slag roof, skylight.

Storage Shed, east side of Richmond street, north of Bath street, \$4,000. William Cramp & Sons Co. (O), Bench and Ball streets. Willard Myers (C), 2000 East Cambria street. Concrete foundations, cement floors, slag roof, 12x48 feet.

Machine Shop, east side of Milnor street, north side of Bleigh street, \$50,000. Tacony Ordnance Corp. (O), Tacony, Pa. F. W. Mark Cont. Co. (C), Finance Building. Four bay extension, concrete foundations, steel frame, brick walls, 127x72 feet, 1 story.

Light Manufacturing Building, Ridge avenue and Calumet street, \$6,000. Povers, Weightman & Rosengarten (O), Ninth and Parrish streets. R. C. Ballinger Co. (C), 218 North Thirteenth street. Brick, 1 story, 40x28 feet, stone foundations.

Office, Wissahickon avenue and Richmond street, \$30,000. American Pulley Co. (O), 4200 Wissahickon avenue. Ballinger & Perrot (C), Seventeenth and Arch streets, Philadelphia. Brick, 2 stories, 50x80 feet, stone foundations, reinforced concrete, slag roof.

Garage, Arbustus street, west of Lincoln avenue, Philadelphia, \$600. James A. Mitchel (O and C), Forty-sixth and Market streets, Philadelphia. Stone, 14x21 feet, slag roof, stone foundations.

Dwelling, 432 Lyceum avenue, Philadelphia, \$2,000. A. Wilkinson (O), on premises. Frank E. Wallace (C), 1220 Chancellor street, Philadelphia, Pa. Brick, 1 story addition, 8x16 feet 2 inches, stone foundations, tin roof.

Office and Salesroom, 126 and 1128 South Front street, Philadelphia, \$1,500. Quaker City Supply Co. (O), on premises. James Johnston (C), 1721 Ludlow street, Philadelphia. Build stairs 4 feet wide first to fourth floor, install two windows and interior alterations.

Store, 2629 Edgemont street, Philadelphia, \$950. Joseph Ciestinski (O), on premises. John W. Janyzed (C), 3169 Filson street, Philadelphia. Two-story rear brick addition, 12x15 feet, stone foundation, slag roof.

Dwelling, 451 Ritner street, Philadelphia, \$300. Dr. S. Maze (O), 445 Ritner street, Philadelphia. A. P. Lacker (C), 5136 Parkside avenue. Interior changes, bath, plastering, etc.

Store, Fourth and Fitzwater streets, Philadelphia, \$2,500. M. Frank (O), 439 Fitzwater street. Philadelphia. A. Shestack (O), 528 Reed street, Philadelphia. Driveway to garage and brick party wall, 25x14 feet 9 inches.

Storage Building, "C" and Ontario streets, Philadelphia, \$3,900. Philadelphia Electric Storage Battery Co. (O), on premises. F. & E. Aubel (C), 2503 Germantown avenue. One story, iron on iron, 49x118 feet.

Storage Building, "C" and Ontario streets, Philadelphia, \$1,100. Philadelphia Electric Storage Battery Co. (O), on premises. F. & E. Aubel (C), 2503 Germantown avenue. One story, 30x40 feet, iron on iron.

Cafeteria, Wissinoming, north of Umber street, Philadelphia, \$25,000. Henry Disston (O), Tacony, Pa. Austin Co. (C), Bulletin Building. One story, 161½x61½ feet, 1 story, 60x81½ feet, brick, slag and asbestos shingles, steel sash, cement floors.

Sand House, east of Delaware avenue and Washington avenue, Philadelphia, \$5,500. Pennsylvania R. R. Co. (O and C), Broad Street Station, Philadelphia. First story, 15 feet 4 inches x47 feet 6 inches; second story,

Buy pure lime, 99% pure, no core, no grit. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Phila. Both 'phones.

A. B. SEE ELECTRIC ELEVATOR CO.

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**ELECTRIC ELEVATORS OF HIGHEST
EFFICIENCY FOR EVERY SERVICE.**

LET US SHOW YOU.

Both Phones

then list your prospects and get to work. you to get new business this year and
"Believe firmly that it is possible for then go out and get it."

generally speaking, indicate a disorderly, inefficient job—and therefore an unprofitable job.

Causes of Construction Accidents.

What are the causes of construction accidents? The Wisconsin Industrial Commission has analyzed 2,000 such accidents for which compensation was paid last year. More than one-quarter of these accidents, and nearly one-half of all fatal accidents, were falls from scaffolds, ladders, buildings, etc. A scaffold manufacturer supplements this experience with a collection of newspaper clippings which relate forty-one fatal scaffold accidents occurring in four months.

Faulty Scaffolding.

Almost any one can build a safe scaffold; the danger lies in the temptation to save time and material on scaffolds for temporary use. If the scaffold breaks, the expected saving becomes a heavy loss. Except for the very lightest work, the supports for two-inch scaffold planks should not be more than eight feet apart. A two-inch plank on a twelve or fourteen foot span will ordinarily carry one man with perfect safety, but if two or three men come together at the center of the span the plank is likely to break. The scaffold must be well braced; one often sees quite a high scaffold without diagonal bracing; depending for stability on one or two boards fastened to an adjoining building. If one of these boards breaks, or is accidentally removed by a careless workman, the scaffold may topple over like a house of cards. The scaffold must also be properly supported at the bottom and not propped upon a pile of loose blocking or a fragile tile.

The old-time carpenter or bricklayer would have scoffed at the idea of a railing on his scaffold—and plenty of them scuff at it today; yet we know from bitter experience how easy it is for even the best and most experienced workman to make a misstep, especially if the scaffold is slippery from snow or rain, or if he stumbles over a piece of brick or wood. A bricklayer can work more efficiently and rapidly on a well-railed scaffold because he does not have to keep always in mind the danger of getting too near the edge. With the railing should go a toe-board, to prevent objects from falling on the heads of workmen below.

The suspended scaffolds used for bricklaying on high office buildings are a splendid example of how even the most serious hazards can be almost eliminated by the intelligent application of the principles of safety. These

SAFETY ENGINEERING IN CONSTRUCTION

By Sidney J. Williams,

Manager Accident Prevention Division, National Safety Council.

While employers, large and small, in almost every other branch of industry, have been reducing their accidents from 50 to 85 per cent., the great construction industry has, with few exceptions, done little or nothing in this important feature of modern efficient production. Why is this? Is it because, as many contractors have told me, "conditions are different in the building trades?" A switching crew is, or was, quite as reckless as a gang of steel erectors; common labor is quite as ignorant and nearly as shifting in the steel mills as on construction work; yet the steel mills and the railroads have made records second to none in modern scientific accident prevention.

Possibly the trouble has been with the contractor. Possibly he has been so accustomed to taking chances on a hundred thousand dollar profit, which a freak of the elements or a rising material market may turn into a loss; perhaps he has been so used to the gamble of competitive bids on jobs fairly bristling with unknown quantities that the loss of a few lives or limbs of his workmen has seemed to him too trifling a side-bet to bother about.

High Accident Rate in Construction Industry.

Whatever may be the cause, consistent, organized accident prevention in construction work is almost unknown, and accident frequency has been correspondingly high. In Wisconsin, the building trades include only 5 per cent. of the workers in all industries, yet they contribute from 15 to 20 per cent. of fatal and serious injuries. In New York State the Industrial Commission tells us that more workers are killed on construction work than in all the factories, although factory workers are four times as numerous. In Pennsylvania, in the building trades alone (not including other construction work), during the first six months of 1918, 111 persons were killed and 1,600 others were injured seriously enough to receive compensation. Note the high percentage of fatalities—over 6 per cent.—two or three times as great as the percentage in other industries.

Increased Insurance Rates Result.

This high accident record is, of course, reflected in insurance rates. The rates are high for all construction work, and for some branches are higher, I believe, than in any other industry—reaching 10, 15 or even 20 per cent. of the payroll. In some sections of the country compensation insurance rates generally went down during the five years before the war, as a result of consistent, intelligent efforts for accident prevention on the part of both employers and state departments; but during this same period rates on construction work remained practically stationary; in some cases, were increased. The "take-a-chance" contractor, who laughed at the Safety First enthusiasm of factory and shop executives, found that he had laughed quite a bit too early, and, as insurance rates, like the rain from heaven, fall on the just and the unjust alike, the careful builder found himself carrying a heavy burden of insurance premiums to pay for the losing gamble of careless competitors.

Isn't it time to stop this unnecessary waste—isn't it time, not only for the individual contractor to set his house in order, but also for him to insist, through the medium of his state and national organizations, his insurance company, and his state government, that all builders give at least elementary attention to accident prevention, and so lessen his premium burden?

Other Losses from Accidents.

While I have emphasized insurance expenditures, these are by no means the only cost of accidents. As in other industries, the temporary stoppage of work, the loss of an experienced man and the cost of breaking in a green man (if, indeed, a green man can be obtained), and the frequent loss or damage of materials, amount to much more than the actual cost of compensation. Indirect costs also result from accidents where no one is hurt, or where the injury is not serious enough to warrant compensation. In fact, accidents,

**Washed Bar Sand and Gravel will take less cement on concrete work. We know how.
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.**

scaffolds—or at least the ones manufactured by reputable firms—are substantially built of selected lumber, with moderate spans, are provided with a railing entirely filled in with wire mesh and are covered over to protect the workmen against material falling from above. The supporting cables and the machinery for lifting them are carefully designed, constructed and inspected. With several of these scaffolds in use at one time and with hundreds of bricklayers at work the mammoth Woolworth building in New York City was erected without a single serious scaffold accident.

On many scaffolds of moderate height, the runway is an important feature. This is often a single plank, so inadequately supported that if it does not break it at least vibrates to such an extent that a secure footing is impossible. I believe I have seen more time wasted by workmen struggling up improper built runways than in any other of the many inefficient methods which one notes on some construction jobs. A substantial, smooth, wide and easy runway will save a great deal of time and prevent delays as well as accidents.

Hanging scaffolds, used for painting and similar work, require careful attention. The scaffold itself should have a railing at the back and at both ends; the ropes require frequent inspection and occasional testing is desirable.

The Use of Ladders.

Falls from ladders are next in number and seriousness to falls from scaffolds. These are often caused by the breaking of some part of the ladder and can easily be prevented by replacing the part as soon as it becomes badly worn, instead of waiting for it to break. We have all seen—we have probably all used—ladders that were suitable only for kindling wood, but which were continued in use through a mistaken idea of economy.

For passing from floor to floor, on a job of any magnitude, double ladders should be provided, one side to be used by men going up and one side by men coming down. On large jobs, many contractors find it profitable to provide temporary stairways in place of ladders, and when one considers the number of men who pass up and down every day the saving in time, as well as the saving in accident hazard is obvious.

Floor Openings.

Many serious accidents have occurred by persons falling through openings in floors. It is obvious that such openings should be railed in or covered over; yet this necessary precaution is often neglected.

Falling Material.

According to the Wisconsin experience, falling objects are next in importance to falls of persons as an accident hazard. The proper construction of scaffolds, runways, and railings around floor openings will prevent many

accidents due to falling material. Where one man or a gang of men is working above another it is very often necessary to make special provision for catching falling tools or materials. This is especially essential in the case of existing buildings, where the men below are factory employees and not in the habit of guarding themselves against falling materials.

Cave-in of Excavations.

In this group fall the numerous accidents caused by the cave-in of excavations. It seems to be the habit of ditch-diggers to take long chances; most ditches that we see are considerably underbraced, from the standpoint of efficiency as well as of safety. It is a good deal easier to brace a ditch than to dig out a cave-in.

Unguarded Machinery.

Cranes, derricks and other hoisting apparatus are prominent in the list of accident causes, while engines, concrete-mixers and similar machinery also come in for their share. Many of these accidents could be prevented by simply guarding the gears, belts, etc.; an exposed gear is just as dangerous on a hoisting engine as on a lathe.

Elevator and Derrick Regulations.

Other accidents in this class are caused by the very dangerous practice of workmen riding up and down on elevators or derricks. This should be prohibited; and let us note in passing that the foreman or the "big boss" must not himself violate the rule if he expects his workmen to obey it.

A delay or misunderstanding of signals is often disastrous. An electric or mechanical bell, or a telephone, should always be provided for both elevator or derrick, except on a very low building, and the wires should be carefully protected against injury.

The Nail Hazard.

The nail hazard is always an important one, although according to the Wisconsin experience, it is not responsible for so large a proportion of construction accidents as many contractors believe. Stepping on and striking against nails and other sharp objects is entirely a matter of keeping things in as clean and orderly condition as possible, which, needless to say, is a great aid to efficient work as well as to safety.

First Aid Kits and Field Hospitals.

To take care of nail punctures and other minor injuries, some sort of first aid equipment is necessary. At the least this should include a bottle of arnica, hydrogen peroxide or other antiseptic, some rolls of gauze bandage, salve for burns, etc., all in a clean box; at the most, we find on some progressive jobs a small field hospital in charge of a trained nurse, similar to the hospital room in an up-to-date factory. An emergency room of this sort, on a large construction job in

Chicago, brought injured men back to work sooner, reduced the number of compensation cases, and raised the morale of the workmen in general. Out of a force of about a thousand men from 40 to 100 cases were treated daily, ranging from a sliver in the hand to fractures or other serious injuries.

Flying Chips.

Injury to the eyes or other parts of the body from flying nails, particles of concrete, stone, etc., are sufficiently numerous to deserve attention. A workman chipping stone, concrete, or steel on a construction job needs to wear goggles just as much as a workman chipping castings in a foundry. Where much chipping is to be done in one place a shield should be erected to protect other workmen or passers-by.

Special Wrecking Hazards.

In tearing down old buildings most of the hazards already mentioned are met with—many of them in an even more exaggerated form. Quite a little time may be saved in this work by taking a chance, and as a result chances are often taken; the insurance rate sometimes runs as high as 20 per cent. When a man is required or permitted to stand on top of a 12-inch wall and demolish it with a pick-ax or crowbar, while other men work below, detailed comment is unnecessary. This kind of work requires constant and careful supervision by a man who has had practical building experience and, also, preferably some knowledge of the strength of materials; the sort of a man who will not saw off the limb of a tree while he is sitting on it or remove an important structural part of a building so that the whole affair may come tumbling down around his ears.

Equal care is necessary when excavating alongside a building, to prevent the walls of the building from cracking or settling.

Personal Element in Accident Prevention.

In all of the foregoing it is evident that mechanical equipment is only a part of the story. No matter how good a scaffold or ladder may be originally, it soon goes to pieces unless it is carefully watched. Other large accident groups which I have not even mentioned—handling material, which was responsible for over 20 per cent. of the accidents in Wisconsin, hand tools, etc.—have practically no connection with mechanical equipment. Safety in construction work, even more than in the factory, can be secured only by constant vigilance on the part of superintendents and foremen and by educating men to be careful. As long as a steel erector takes delight in exposing himself to unnecessary chances, so long will the accident frequency and the insurance rate in steel erecting be high, no matter how safe the derricks, ladders and scaffolds may be.

This is where the contractor says: "Safety education is all right in the factory where

We have pebbles all sizes. Cost less than what you are using. DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia.

you have a steady, tractable lot of men, but it won't go on construction work." Factory executives may have something to say about the alleged steadiness and tractability of their men—but, admitting that many building workmen are deliberately reckless, are they more so than a switching crew on a railroad? Isn't human nature more or less the same in all trades? Do building workmen, any more than other workmen, really want to be hurt, to undergo days or weeks of suffering or see their families in want? If they can be shown, tactfully but persistently, that such will be the consequences of their carelessness, will they not respond to such teaching?

Success of "Safety Engineer" Demonstrated.

One construction firm, at least, will answer these questions without hesitation. For the past year or two the Fred T. Ley Company, of Springfield, Mass., has conducted an organized safety campaign under the direction of an experienced safety engineer, and has accomplished remarkable results, very equal to those which have followed similar efforts in factories and mills. The first year of this work reduced accident frequency 25 per cent. and accident costs 53 per cent. In the second year, frequency was reduced 55 per cent. and costs 66 per cent.

VALUE OF SIDE LIGHT.

Of late years many owners have learned to their sorrow the necessity of protecting the side light of their building, this lesson being now so generally known that unless permanent light is assured by reason of being on a corner or adjoining a low permanent structure more land is purchased than is required for the proposed building. Years ago little thought was given to that question, but in recent years with the increasing of the height of buildings, construction in the new sections is being protected either by the buying of adjacent land or the designing of the structure so that the maximum amount of light and air is provided for in the center or rear of the lot.

There's one variety of advertiser who gets our Angora. This is the chap who can't afford a large space and doesn't advertise, as a regular thing, because a small space "isn't seen." Some of the biggest advertisers we have started out with small space. Ask them whether the small space is seen. If advertisers had to wait until their businesses developed to full page stature before advertising, there'd be mighty few advertisers. The big man becomes big by growth. And growth starts with the seed.

The "Builders' Guide" is the **OLDEST**, and the **ONLY** Architectural Publication in Pennsylvania.

AMERICANS RECONSTRUCT ITALIAN VILLAGE.

A cablegram from the American Red Cross commissioner to Italy, dated Pisa, states the following plans of a new enterprise in connection with the refugee problem:

Steps were taken here to-day toward building a model American village, for the purpose of providing new homes for people made homeless by the war. On a site comprising 30 acres of ground, adjacent to the leaning tower and other world-famous monuments of Pisa, ground was broken in the presence of the king, head of the Italian Red Cross, Major Chester Aldrich, and other officers of the American Red Cross. It is expected the village will be completed in 90 days.

The buildings will be made of cement. There will be a public square, church, school house, hospital and public eating kitchen. Modern sanitary facilities will be installed. The water supply will be brought over the aqueduct built by the Medici 500 years ago, which still is in perfect condition. The site will provide homes for 2,000 refugees from the Venetian district.

It is proposed to transplant to the new village industries with which the refugees are familiar. The entire project is under the supervision of the American Red Cross, and is regarded as one of the most interesting undertakings in the effort to deal with problems arising out of refugees from devastated and threatened districts.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggio give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

The man who starts out with the idea of getting rich won't succeed; you must have a larger ambition. There is no mystery in business success. If you do each day's task successfully, stay faithfully within the natural operations of commercial law, and keep your head clear, you will come out all right.—John D. Rockefeller.

The man who doesn't advertise, these days, is forgotten. The world is too busy to look up dead ones.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an oil-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Our specialty is Portland Cement that will stick and pass the City Department. DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Philadelphia.

DUTCH PURCHASING AGENCY.

The central company for purchasing building materials has completed its organization by the election of officers and has established headquarters at Mauritskade 33, The Hague, writes United States Vice Consul A. C. Nelson, The Hague, Holland. In an interview which Mr. Nelson had with the manager of the company, H. C. A. Henny, the latter said:

"The municipalities of The Hague, Amsterdam, and Utrecht, in conjunction with the Ministry of Waterstaat, which has charge of all public works of the state, were the originators of the company, but later more than 100 Dutch municipalities joined in this enterprise. The object of the company is to supply the different municipalities with as cheap building material as can be bought by buying in large quantities, but no private person can make use of the company. In other words, our aim is to assist municipalities only, in erecting buildings needed for their population."

Frankly, I hardly think we shall be able to buy much from the United States, at least not to start with, under present circumstances; but even after the war I think high freight rates will make it impossible for the United States to compete with northern Europe and Germany. Our paving material we get from Sweden and Belgium, and for roofing we shall use our good old Dutch tiles.

However, I believe we shall look to the United States for bathroom fixtures, etc., if it is possible to import these from there at reasonable figures. At the same time I wish to say that offers from the United States for all sorts of building materials will of course be welcome and will always be given a candid consideration."

In this connection it might be stated, Mr. Nelson adds, that the paving material used in Holland consists of stone and "klinkers" (hard burned brick); asphalt paving is also used to a great extent.—"American Contractor."

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

STANDARDIZATION OF LUMBER.

By L. P. Putnam.

More than 200 mills now subscribing to the Southern Pine Association, scattered from Texas to Florida, including Oklahoma and Missouri, make their products according to grades formulated by the Southern Pine Association. These grades are kept uniform through the efforts of a large corps of inspectors, who go from one mill to another and instruct the graders. Realizing that the grading of lumber is not an exact science, field inspectors are kept who, when complaints may be made by the purchasers from these mills, go out into the territory and grade the lumber which has been shipped. In this way a uniform and even grade is shipped by these mills.

The conservation of material which is possible by the standardization of sizes manufactured by the Association Mills was also emphasized by Mr. Putnam. It does not require as good material to build a chicken house or a barn as it does to build a home; and by co-operation with local retail lumber dealers a variety of stocks prepared according to the standards of the association and conforming to this idea may be found in retail lumber yards throughout the country.

SAVING CEMENT SACKS.

The demand for cotton products has created an unprecedented shortage. There is also a decrease in cotton acreage, which makes the situation still more critical. Cement sacks must be saved. Empty sacks should be returned at once.

Supply dealers are being urged to warn their customers that a sack that has been wet is useless, and the sacks should be stored where they will not be injured by water. The sack should also be protected against injury in handling. It is becoming a question of saving sacks or having no sacks to save.—Exchange.

Fifty years ago the grocer set out a keg of mackerel and a box of kindling wood, and sat down to wait for customers. Today he carries street-car and newspaper advertising and dresses his windows as smartly as the department store. If it didn't pay he'd still be sitting behind the stove waiting for customers with a mackerel keg out front doing service for a sign.

Don't be a Rip Van Winkle. Advertise and let everybody know you are awake and abreast of the times.

A good sign is a good thing. A good "ad" is a better thing. A good sign and a good "ad," pulling together, the best possible thing.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently, "but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectually than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

Why not try it out?

The cost is not excessive.

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Pennsylvania's Oldest Architectural and Building Trades Magazine

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1918

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126th Annual Statement

December 31, 1917

Cash Capital	-	-	\$ 4,000,000.00
Reserve for Premiums	-	-	10,630,740.40
Reserve for Losses	-	-	4,419,000.00
Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance
Tornado
Sprinkler
Explosion
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Are you familiar with the economy features of these materials? If not let us supply you with details and quote you on your requirements.

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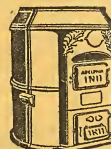
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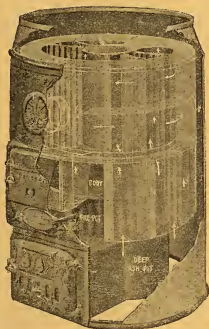
Builders' Guide

ENTERED AT THE PHILADELPHIA POST-OFFICE AS SECOND-CLASS MATTER

Vol. XXXIII., No. 44
October 30, 1918

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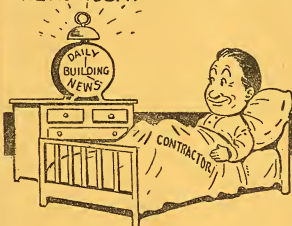


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should be used wherever a sanitary floor is desired. Practically noiseless, it is the ideal floor for schools, public buildings, railway stations, stores, kitchens, etc.

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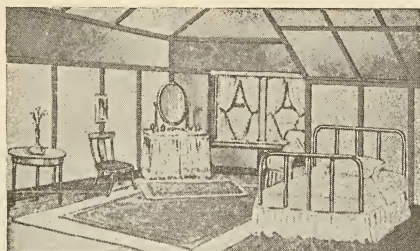
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Specialists in Factory and Jobbing Lumber
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BUILDERS' EXCHANGE

IN THE EXHIBITION ROOM

This Office has been occupied by the Secretary and is now released by his removal to another location.

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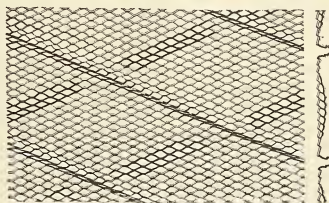
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Other transits from \$15 to \$115.

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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 44

PHILADELPHIA
October 30, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 324-325-326)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

PUBLISHED BY

Building News Publishing Company, Inc.
PERRY BUILDING, PHILADELPHIA
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H. A. Lang.....Vice-President
Joseph M. DeLone.....Secretary and Treasurer

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As The Editor Sees It



NOW that the first peace alarm has sounded we ask ourselves "After Peace—What?" What will be the outcome if the labor now occupied in war work were to find itself without employment. Far-sighted business men have realized the confusion, the disorganization and unrest which would result from such an occurrence and are already planning to circumvent these conditions.

In order to accomplish the desired result, the co-operation of both workmen and employers must be obtained. Workmen now engaged in war industries are asked to signify what trade they are fitted for in normal peace times; employers of labor in normal activities are asked to make known the number of workmen they can use as soon as the war ends. If these facts can be ascertained, it will be possible to have positions filled and men ready to step into their new jobs without any idleness and delay as soon as war activities cease and peace activities begin.

As we look into the future, one industry looms big before us—the building industry, which will play a most important part in the reconstruction period. Building trades, then, will do much toward solving the labor problem. Presenting this phase of the situation, S. W. Strauss, of New York, writes in the *American Contractor*.

While there is much popular complaint over the scarcity of building operations, which is bringing about a period of excessively high rentals, these conditions

will prove blessings in disguise at the end of the war, if not before.

The building and construction industry, which is second in importance and magnitude only to agriculture, will prove an industrial and financial shock-absorber in the period of adjustment that will come with the ending of hostilities—a period which to many seems fraught with treacherous possibilities.

Certain it is that the sudden curtailment of demands for munitions and other war supplies and the home-coming of several hundred thousand young men from the fighting front each month will present a situation such as America never has witnessed before.

There will be thrown on the markets a vast reservoir of man-power, and alarm is felt by many as to the results of such a precipitate situation. However, the building industry, by reason of its present stagnation, will be able to absorb a sufficient amount of this over supply of labor to prevent general unrest.

New York City alone is so far behind in building accommodation that it will take many years of intensive construction work to bring the situation to terms of equality with the growth of the city. In all American cities much the same conditions prevail, though less acutely.

While the country thus will be saved from an embarrassing situation, there will be ushered in the most remarkable period of building activity America has ever seen. Housing accommodations of all kinds will have to be brought back

to normal, and there will be a tremendous demand for increased manufacturing and transportation facilities to accommodate us to our newly acquired position of world-wide commercial supremacy. The era of high costs for materials and labor and of high rentals and increased real estate values will continue after the war as a result of the unprecedented activity.

* * *

MEANWHILE the demand for war workers is still unsatisfied and not long ago the Department of Labor announced that war industries are in need of 400,000 common laborers, in addition to the need for skilled hands. It is necessary for the Government to recruit labor to fill this need and the following plan has been adopted:

The country has been divided into thirteen federal districts, each in charge of a superintendent of the United States Employment Service. The districts are sub-divided into states, each in charge of a State Director. Local community labor boards will be formed in each community, having jurisdiction over the recruiting and distributing of labor in its locality.

As far as possible labor will be kept in the home town and no labor can be removed from the community by the Employment Service without the consent of the State Director. No labor can be removed from state to state without the approval of the United States Employment Service at Washington.

The surplus of labor in the building

**DRAWING
MATERIALS**

CHARLES H. ROBBINS, JR.
125 S. 11th Street, Philadelphia
BELL PHONE, WALNUT 1086 KEYSTONE PHONE, MAIN 497

**BLUE
PRINTS**

trades which recently existed has been wiped out and now there actually exists a shortage according to the report of the United States Employment Service. Work under way at Army cantonments is suffering for want of carpenters.

Camp Knox, Ky., which was to have been ready for military occupancy October 1, may not be completed for several months. At that place alone 10,000 skilled and unskilled men are urgently needed. The most serious shortage facing the authorities at the Camp Knox cantonment is for carpenters, there being unfilled orders for 6000 registered with the employment Service. To a lesser degree the same situation prevails at Camp Meade, Camp Bragg, Camp Jackson, Paris Island, and the Navy base at Newport News.

* * *

ALTHOUGH this labor situation presents to us a vital problem we must not let it blot from our minds the housing problem. This concerns itself, indeed, not only with the present, but with the future as well, and must not be forgotten in the light of newer problems. According to Noble Foster Hoggson:

The best way to promote the growth of Bolshevism in this country is through maintaining a low standard of living, of continuing to force three men to occupy the same bed in eight-hour shifts, of herding twenty men and more into one room for sleeping quarters.

The solution to a problem of social unrest is through the ministrations of social justice. The average worker (the majority) seeks nothing more than a condition of contentment—a family, a decent living wage, a place in the community, the full rights of citizenship. These may be all summed up in "Home."

And:

Housing is not only an immediate problem, it will be one of the big after-the-war problems. Now is the time to solve it, not only for the present, but for the future. We must build real homes, establish real communities, permanent homes and permanent communities. We must do it now, and do it right, before it may be too late.

When you stop to consider that the Guide reaches every week and is read by architects, builders, building owners, contractors and sub-bidders in every branch of building construction, you must perceive its unique importance as a medium for advertising with an appeal to that class. Every copy reaches a live prospect.

Shouldn't you be a regular subscriber to a paper, such as the "Guide," that fights your battles?

ESSENTIALS IN PLANNING INDUSTRIAL HOUSES

In the consideration of a project for industrial housing it is important to bear in mind two things: First, that the people to be housed are human beings, and not only that, but that they comprise what is, perhaps, the most essential element in our economic population—labor; secondly, by regarding them in this light and making possible for them healthful, happy surroundings in which they may lead contented, useful lives, the actual economic value of the workman is appreciably increased, a higher standard of loyalty and reliability insured, and his influence in the shop and as a citizen developed along constructive lines.

Manufacturers are rapidly learning to treat their employees' working environment as an important factor in efficient production. There is no doubt but that there is a significant relationship between the physical aspect of a factory and its output. Why, then, should it not be conceded that the worker's living environment has some bearing on his industrial capacities?

At this time, however, the problem does not simplify itself into a matter of increasing the capacity of an employee by improving his surroundings. On the contrary, it is becoming impossible to hold, or even to obtain skilled labor, particularly in industries congested by war demands, unless attractive and comfortable living surroundings are available to the workman and his family.

This is not so much true of the single man as of the married man with a family, since the single man is usually content with one room, reasonably clean and well kept. The married man, however, in addition to his own comfort, must take heed of the domestic efficiency of his home, must look to the environment in which he places his children, and must, in short, so provide for them that domestic worries and uncertainties may not affect his efficiency as a worker.

It must not be forgotten that the housewife is an important factor in this equation. It is, after all, ultimately more important that she be contented than that the head of the family be satisfied with his lot, for there is no denying the fact that unsettled domestic conditions can be held responsible for a great deal of labor turnover and industrial unrest.

Hence, in planning houses for industrial workers, we must bear in mind the needs and desires of the housewife first and last.

The first element to establish in this equation of industrial housing is the question of what constitutes a habitable house. Since a house consists chiefly of a group of rooms, we must consider the essential requirements of a proper room.

Size of Rooms for Workman's Home.

First of all, the dimensions of the room must be sufficient. There must be adequate

floor area, and the ceiling heights must not be too low. From 80 to 100 square feet should be the minimum size of a bedroom. Government standards require one large bedroom 10x12 feet or larger. Kitchenettes are a more variable quantity, Government standards permitting them to be 70 square feet when a separate dining room is provided. More latitude is possible in living rooms, but they should not contain less than 150 square feet, particularly when no separate dining room is planned for.

As for ceiling heights it should be remembered that 700 cubic feet of air is hardly sufficient for two adults; plans must therefore be made accordingly. In general it may be said that no ceiling heights should be less than 8½ feet. There are some exponents of good housing, on the contrary, who feel that such high ceilings are unnecessary and absurd, and that 7 feet 8 inches or 8 feet is quite sufficient. Assuredly it is true that there is more beauty and much more of a homelike quality about the low ceiled room, but there is room for argument from the standpoint of health.

Height of Window Heads Important.

Next in importance to the height of ceiling is the height of window heads. The greatest possible height should be provided for, to insure direct light rays penetrating as far into the room as possible. In addition to this they should afford as much sunlight as possible and a means of ventilation. Needless to say, no rooms should be without windows, and the net glass area for minimum requirements should not be less than 10 square feet. The ratio of one-seventh or one-eighth of window area to floor area is a very good one to follow and will insure plenty of light and air. Effort should be made in placing windows to provide for cross ventilation; when possible windows should be placed on more than one side of a room. Houses should not be so grouped or combined that windows will open on a small, enclosed court; this obviously makes the value of a window, however large, of little consequence. The better method, of course, is to plan either for houses entirely detached, or for row houses so arranged that they shall not be more than two rooms deep.

Another point of importance is the matter of designing the entire house so as to make possible good maintenance and cleanliness. Simplicity is the prime factor here, combined with judgment as to floor surface, character of finish and materials, and good methods of ventilation. In recent years the demand for smooth impervious walls, the use of hardwood for floors and generally for interior woodwork has greatly increased.

All of the foregoing may be considered as the barest essentials in a housing scheme.

(Continued on Page 605)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Coal Pockets, Twentieth and Oregon avenue, Philadelphia. Architect, private plans. Owner, Girard Estate, care of Mr. Merkle, Lafayette Building, Philadelphia. Heavy timber. 115x20 feet, concrete foundations. Owners taking bids due November 1st. H. E. Grau Co., 1707 Sanson street. Thos. Little & Sons, 1715 Moravian street. F. L. Hoover & Sons, 1023 Cherry street, and Wm. Steele & Sons Co., Sixteenth and Parkway, are figuring.

Bank (alts.), 4352-54 Frankford avenue, Philadelphia. Architects, Starks, Woodruff & Schuch, St. Girard Building. Owners, Second National Bank, on premises. Preliminary plans in progress. Too early for details.

Fuel Oil Storage Plants, Spec. 3595, Norfolk, Va., and Philadelphia, Pa. Architect, private plans. Owner, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Plans in progress.

Factory Building (alt.), Indiana avenue and A street, Philadelphia. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owner, Franz C. Merz, on premises. Brick work, interior alterations. Architects have received bids.

Storm Vestibule, Sixty-third avenue and Thirtieth street, Oak Lane. Architect, Louis Magaziner, 603 Chestnut street. Owner, Bernard Selig, on premises. Mill work, painting and glazing. Owner and architect taking bids. Speech & Sperry, Heed Building, are figuring.

Pavement, Platform, Ramp Piers and Boat-house, Spec. 3421. Architect, private plans. Navy Yard, Philadelphia. Owners, United States Government, care of Office of Public Works, Navy Yard, Philadelphia. Concrete, concrete walls. Scale Pit, with Winch Footing, scale, 100,000 pounds capacity, 12x20 feet; Boathouse, frame, 1 story, 48x60 feet; Pier, 126½x12 feet, ready roofing, metal lath, waterproofing, electric lighting. Lowest bidder: Geo. F. Pawling Co., 1432 South Penn Square, Philadelphia. \$99,000, 175 days.

Coal and Ash Handling Plant, Engine House, Spec. 3576. Architect, private plans, Navy Yard, Philadelphia. Owners, United States Government, care of Supply Officer, Navy Yard, Philadelphia. Excavation, concrete work, miscellaneous iron work, mill work. Low bidders: Concrete Construction Co., \$9,652, \$6,976; Lam Bldg. Co., \$10,150, \$6,240.

Garage, northeast corner Twenty-third and South streets, Philadelphia, \$12,000. Architect, private plans. Owners, Edw. M. Harris, 2220 Chestnut street, Philadelphia. Brick, 1 story, 90x155 feet, slag roof, cement floor, gasoline storage system electric lighting. Owner will sub-let.

Repair Shop, Frankford avenue and Bridge street, \$4,500. Architect, private plans. Owners, Philadelphia Rapid Transit Co., 810 Dauphin street. Interior alterations, installing (2) 5-ton electric cranes, steel runways, brick piers, hollow tile partitions. Owners will build.

delphia, \$2,400. Architect, private plans. Owner, E. Cadwallader, Delta Spring Mill, Frankford. New roof, new windows, repair fire damage. Contract awarded to A. H. Spensard, 822 Wood street, Philadelphia.

Factory (add.), northwest corner Fifty-seventh and Grays avenue, Philadelphia, \$2,500. Architect, private plans. Owners, Unit Const. Co., Fifty-seventh and Grays avenue, Philadelphia. Brick (slow burning), 1 story, 40x60 feet, slag roof. Contract awarded to John N. Gill Co., Otis Building, Philadelphia.

Coal Bunker, east side of Canal, east of Fountain street, \$4,000. Owner, A. T. Baker & Co., on premises. Concrete and timber, concrete floor. Contract awarded to Barclay White & Co., 1713 Sanson street.

Restaurant (alts.), Thirty-third and Ludlow streets, Philadelphia, \$5,000. Architect, private plans. Owners, Croft & Allen, Thirty-second and Market streets, Philadelphia. Interior alterations, bridge and stairway, iron on metal frame. Contract awarded to J. Myers & Sons Co., Witherspoon Building.

Garage, 6123 Oxford street, Philadelphia. \$650. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner, Mary Craig Bates, on premises. Brick and stone, 21x32 feet, slate roof, metal cornice. Contract awarded to Daniel E. Hogan, 6043 Columbia avenue.

Tenement House (alts.), 1625 Wallace street, \$2,600. Architects, Wm. Grohen, care of owner. Owner, I. M. Rubincum, Oak Lane, Philadelphia. Alterations to partitions and general interior alterations. Contract awarded to I. A. Dunkelberger, 71 E. Herman street.

Garage, 6130 Columbia avenue, Philadelphia, \$1,400. Architect, private plans. Owner, John B. McClatchey, 848 Land Title Building, Philadelphia. Stone, 18x21 feet, slate roof, cement floor. Owner will build.

Store (add.), 5613 Germantown avenue, \$2,000. Architect, private plans. Owner, F. W. Woolworth Co., New York City. Brick, 1 story, 15x64 feet, slag roof, pine floors, heating extension, electric lighting rearrangement, metal ceiling. Contract awarded to Brownworth & Co., 1611 Sanson street, Philadelphia.

Pottle Washing Room, 1448-50 N. Eleventh street, Philadelphia, \$4,000. Architect, private plans. Owners, Supplee-Wills-Jones Co., Twenty-sixth and Jefferson streets. Brick, 3 stories, 32x70 feet, stone foundations, slag roof. Contract awarded to Geo. Kessler Cont. Co., Draxel Building, Philadelphia.

Factory (alts.), 214 South Twenty-fourth street, Philadelphia, \$1,240. Architect, private plans. Owners, Chas. W. Hiros Co., on premises. Ventilators (3) on top of building. Contract awarded to C. P. Roeger, 51 North Hutchinson street.

Restaurant, 907 Race street, Philadelphia, \$1,000. Architect, private plans. Owner, Far East Chinese Restaurant Co., 907 Race street, Philadelphia. Interior alterations, new cook-

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Theatre and Stores, Broad and Montgomery avenue, Philadelphia, \$20,000. Architect, private plans. Owner, Anna H. J. Taylor, guardian, 527 Lafayette Building. General restoration of buildings (fire damage). Contract awarded to Frank G. English, 1610 N. Carlisle street.

Factory (alts.), 1024 Buttonwood street, Philadelphia, \$1,000. Architects, Peuckert & Wunder, 310 Chestnut street, Philadelphia. Owners, Elliott-Fisher Co., Limited, on premises. General interior alterations, skylight and new elevator. Contract awarded to Harvey H. Yeager, 4430 North Nineteenth street.

Machine Shop, Dyott street, Richmond and Norris streets, \$65,000. Architect, private plans. Owners, Wm. Cramp & Sons S. & E. Bldg. Co., Richmond and Norris streets. Brick, 1 story, 218x85x37 feet, steel columns, N. C. pine sheathing, slag roof. Contract awarded to F. A. Havens Co., 845 North Nineteenth street, Philadelphia.

Store and Dwelling, southeast corner Second and Kenilworth sts., \$5,300. Architect, private plans. Owners, J. Gold, on premises. Brick, 2 stories, 17½x40 feet, slag roof, stone foundations, metal cornice, hot water heating. Contract awarded to M. Cylinder, 521 Milford st., Philadelphia.

Office Building, southeast corner Thirty-second and Powelton avenue, \$10,000. Architect, private plans. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, 1 story, 22x86 feet, 16 inches, concrete foundations, slag roof. Contract awarded to Wm. T. McCouch, 402 Commercial Street Building.

Storage Building, 1623 North American street, Philadelphia, \$2,450. Architect, private plans. Owner, Fleck Bros. Co., 50 North Fifth street, Philadelphia. New iron girders, brick add., 1 story, 18x75 feet. Contract awarded to Geo. W. Roberts, 1105 E. Chelton avenue. Garage, Carlisle and Oxford streets, Phila-

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ing range. Contract awarded to A. P. Fraim, 319 Market street, Philadelphia.

Cooking School, Spec. 3465, United States Naval Home, Philadelphia, \$28,996. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story, office bldg., 35x22 feet; Cooking School, 48x55 feet; Wash House, 80x24 feet, ready roof, steam heating, electric lighting, cement and pine floors, ventilators. Contract awarded to Chas. Gilpin, Harrison Building, Philadelphia. Time, 50 days.

Factory (alts.), 524 North Sixth street, Philadelphia, \$1,500. Architect, private plans. Owners, Philadelphia Belting Co., Sixth and Spring Garden streets, Philadelphia. New metal frame, mill work, reinforcing floor, ce-

ment work. Contract awarded to Wm. J. Gruher Co., 219 East High street.

Coal Trestle, South of Wolf street and West of Swanson street, \$7,000. Architects, private plans. Owners, Morgenthaler Bros., Philip and Jackson streets. Concrete and steel. Contract awarded to Wm. F. Koelle and Co., Twenty-sixth and Oxford streets.

Lumber Shed, Frankford Arsenal, Philadelphia. Architect, private plans. Owners, United States Government, care of Emergency Construction Corp., Philadelphia. Steel, reinforced concrete, brick, terra cotta coping, 1½ stories, 100x150 feet, slag and cement tile roof, cement and wood block floors, electric elevators, rolled steel sash and skylights, fire doors, kalamein doors and trim, steel plate and steel doors. Contract awarded to Wm. Steele & Sons Co., Sixteenth and Parkway.

Corr Hall (alts.), Villa Nova, Pa. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Villa Nova College, care of Augustinian Order, on premises. New refectory and kitchen equipment, cabinet work, concrete work, electric wiring, metal lath, plastering. Contract awarded to Jacob Myers & Sons Co., Witherspoon Building, Philadelphia. Central and Y. M. C. A. Building, Harriman, Pa. Architect, private plans. Owners, Emergency Fleet Corporation, Merchant Ship Building Co., Harriman, Pa. Brick (fireproof), 2 stories, 60x470 feet, and 5 stories, 100x60 feet, slag and tile roof, hardwood and cement floors, hollow tile, metal lath, tile work, fire doors, roof ventilators dampproofing (plumbing, heating and electric work reserved). Owners taking bids due November 2nd. H. H. Wehmeyer, 509 W. Cumberland street, Philadelphia, is figuring.

War Workers' Buildings (alt. and add.), Fernwood and Chester, Pa. Architect, private plans. Owners, United States Housing Commission, 130 South Fifteenth street, Philadelphia. Miscellaneous interior and exterior alterations, new partitions, new wood and cement floors, plastering. Owners taking bids. Hogg Const. Co., 1634 Sansom street, and John H. Yardley, 1716 Sansom street, are figuring.

Hospital Buildings, Carlisle, Pa., \$1,000,000. Architect, private plans. Owner, War Department, United States Government, Washington, D. C. Details undecided. Contract awarded on percentage basis to Warren Moore Co., Colonial Trust Building, Philadelphia.

PENNSYLVANIA Construction News

Foundation for Water Tank, Fort Mifflin, Pa. Architect, private plans. Owners, United States Engr., 815 Witherspoon Building, Philadelphia. Wood and concrete piling, concrete work. Owners taking bids due November 31st. Lam Bldg. Co., 1001 Wood street and Wark & Co., 1737 Filbert street are figuring.

Residences (200), Chester, Pa., \$4,000 (each). Architect, private plans. Owners, Alex. Chamblay, Twenty-first and Butler sts., Philadelphia. Brick, frame and hollow tile, 2 stories, 16x44 feet, shingle roof, hot water heating, electric lighting, hollow tile. Owner taking sub-bids.

Garage, Mineral Spring Road, Reading, Pa. Architect, A. A. Ritcher, Sixth and Court streets, Reading, Pa. Owner, Max Luria, on premises. Reinforced concrete, 2 stories, 2½ x31 feet, concrete roof, cement floors, hot water heating, electric lighting, gasoline storage system, retaining walls, grading and terracing, cement work. Plans in progress.

Residence, The Heights, Lincoln avenue and Walnut street, Lebanon, Pa. Architect, A. A. Ritcher, Sixth and Court streets, Reading, Pa. Owner, Dr. Clarence Snavely, Lebanon, Pa. Hollow tile and stucco, 2½ stories, 30x1½ feet, slate roof, stone foundations, steam heating, electric lighting, hot water heating. Preliminary plans in progress.

Steel Foundry (extension), Lebanon, Pa. Architect, A. A. Ritcher, Sixth and Court streets, Reading, Pa. Owner, Lebanon Steel Foundry, Lebanon, Pa. Pattern Shop and Storage Building, stock and store roof, executive's office, storage building, 1 story, 24x24 feet, 2 stories; and basement, 48x78 feet. Brick, mill construction, steam heating, electric lighting, electric elevators, electric wiring. Architect taking bids. Beard Const. Co., Reading, Pa., and G. H. Greiner and W. H. Perry, both of Lebanon, Pa., are figuring.

Bridge, over Aughwick Creek, Cromwell Twp., Huntingdon Co., Pa. Architect, C. E. Benson, Huntingdon, Pa. Owner, State of Pennsylvania, care of Geo. A. Shreiner, Superintendent Public Grounds and Buildings, Capitol Building, Harrisburg, Pa. Concrete and steel, 2 spans, arch bridge. Plans completed. Owners ready for bids due November 12th at noon. **Academy Building** (alts.), Villa Nova, Pa. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Villa Nova College, care of Augustinian Order, on premises. General interior alterations, consisting of alterations to refectory, kitchen, community room, reception roof, laboratory, bath rooms, plumbing and new partitions. Contract awarded to Jacob Myers & Sons Co., Witherspoon Building, Philadelphia.

New Jersey Construction News

Guard House, Gloucester, N. J. Architect, private plans. Owners, Pusey & Jones, Gloucester, N. J. Frame, 1 story, 46x38 feet, ready roof (heating and lighting, res.) Owners taking bids, due October 31st. J. S. Rogers Co., Drexel Building, and F. A. Havens Co., 845 North Nineteenth street, are figuring.

Smithery, Blacksmith Shop, Coppersmith Shop and Electric Shop, Spec. 3501, Cape May, N. J., \$9,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief Bureau of Yards and Docks, Navy Department, Washington, D. C. Bids due November 11th. Owners are ready for bids. Lam Bldg. Co., 1001 Wood street, and Cramp Co., Denckla Building; Wark Co., 1737 Filbert street, Philadelphia, will figure.

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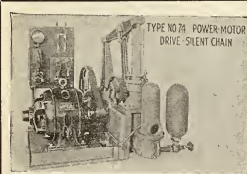
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Manufacturing Building, Newark, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Essex Foundry Co., Newark, N. J. Brick, slow burning construction, 1 story and basement, slag roof, cement and reinforced concrete floors rolled steel sash, office partitions. Architects taking bids due November 3rd. Ensie Bros., Newark, N. J., New Jersey Concrete Steel Co., Newark, N. J., Fred G. Kilgus, Newark, N. J., Austin & Co., 217 Broadway; Altieri Construction Co., 101 Park avenue, and Cramp & Co., 25 East Twenty-sixth street, all of New York City, are figuring.

Magazine Building, Spec. 3596, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards & Docks, Navy Department, Washington, D. C. Plans in progress.

Magazine Building (Completion), Cape May, N. J., \$2,900. Architect, private plans. Owners, U. S. Government, care of Commandants'

Office, Twelfth and Chestnut streets, Philadelphia. Concrete, 1 story, 35x14 feet, asbestos shingle roof, concrete floors, steel doors, roof ventilators. Contract awarded to Wilbur Beaumont, Atlantic City, N. J.

Barracks for Federal Armed Guards, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Frame, 2 stories, 196x10 feet, ready roofing, concrete foundations, steam heating, electric lighting, wood floors, copper wire screens. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

Rowing School (completion), Cape May, N. J., \$5,615. Architect, private plans. Owners, U. S. Government, care of Commandants' Office, Twelfth and Chestnut streets, Philadelphia. Concrete, 1 story, 35x182 feet, asbestos shingle roof, concrete, asphalt and mastic floors, roof ventilators. Contract awarded to Wark & Co., 1737 Filbert street, Philadelphia.

story, various sizes, built up roof, concrete, wood and composition floors, hollow tile, metal lath, skylights, steel doors, iron stairs, concrete foundations, hot air and steam heating, electric lighting. Owners taking bids, due November 4th at 11 A. M. F. W. Mark Cont. Co., Finance Building, Philadelphia, is figuring.

Church, Clayton, Del., \$10,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner Father O'Connell, Clayton, Del. Frame, metal lath and stucco, 1 story, 30x70 feet, slate roof, brick foundations, hot air heating, electric lighting, pine floors. Plans in progress.

Ordinance Buildings (7), Spec. 3435, Washington, D. C. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, steel and concrete and terra cotta, 1 story, slag roof, cement floors, steam heating, electric lighting, hollow tile and stucco, rolled steel sash, fire doors. Lowest bidder, Geo. F. Pawling Co., 1432 South Penn Square, Philadelphia, \$433,000.

Houses (576), Army and Navy Bases, Glenwood Tract, Norfolk, Va. Architects, Geo. B. Post & Son, 101 Park avenue, New York City. Owners, U. S. Housing Corp., Washington, D. C. Frame and frame and stucco, 2 stories, roll, slate and shingle roof, hot water heating, electric lighting. Owners taking bids, due November 1st. Cramp & Co., Denckla Building Philadelphia, are figuring.

Miscellaneous Construction News

Storage Buildings (5), Naval Mine Depot, Spec. 3543, Yorktown, Va., \$750,000. Architect, private plans. Owners, United States Government, care of C. W. Parks, Chief, Bureau of Yards & Docks, Navy Department, Washington, D. C. Steel frame, concrete, steel trusses, asbestos protected metal siding, various sizes, built up roof, reinforced concrete, asphalt mastic finish floors, electric lighting, rolled steel sash, metal doors. Owners taking bids due November 11th at 11 a. m. Warren-Moore Co., Colonial Trust Building, and F. W. Mark Cont. Co., Finance Building, Philadelphia, are figuring.

Magazine Buildings (10), Naval Mine Depot, Spec. 3544, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, hollow tile or brick and stucco, concrete foundations, built up roof, reinforced concrete mastic finish, electric lighting, steel doors, roof ventilators, dampproofing. Owners taking bids, due November 11th at 11 A. M. F. W. Mark Cont. Co., Finance Building, and Warren-Moore Co., Colonial Trust Building, Philadelphia, are figuring.

Buildings (9), Conveyor Tressels (2), Spec.

3542, Naval Mine Depot, Yorktown, Va. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and wood, hollow tile, concrete, asbestos protected metal siding, 1

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Apartment, 537 Brinton street, Philadelphia, \$2,400. Morris Realty Co. (O), 122 South Thirteenth street, Philadelphia, Pa. John McCoy (C), 1215 Summer street, Philadelphia. Side addition, 10x12 feet, 2 stories, brick partitions, stairways, one kitchen, one bath, hot water heat, second story balcony.

Printing Establishment and Dwelling, 428 West Girard avenue, Philadelphia, Pa., \$800.

John H. Weisler (O), 2026 North Fifth street, Philadelphia, Pa. John A. Codori (C), 1235 Arch street, Philadelphia. Repair damage.

Store, 4422-24 Lancaster avenue, Philadelphia, \$2,000. George Percy (O), Bourse Building, Philadelphia, Pa. Mitchell Bros. (C), 2125 Race street, Philadelphia, Pa. Repair fire damage. Brick, slag roof, electric work.

Tank Tower, Lehigh avenue, east of Nine-

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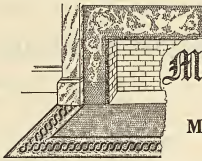
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teenth street, Philadelphia, Pa., \$900. C. H. Wheeler (O and C), Sedgely and Lehigh avenues, Philadelphia. Structural work for supports of 1,500 gallon tank.

Storage and Dwelling, 1507 Naudain street, Philadelphia, Pa., \$330. Bethel Church (O), Fifteenth and Lombard street, Philadelphia, Pa. J. F. Trent (C), 2041 Master street, Philadelphia, Pa. Steel girders in front, new doors.

Dwelling, 315 Collom street, Philadelphia, Pa., \$1,000. Enriece Mariotti (O and C), 315 Collom street, Philadelphia, Pa.

Dye House Finishing Room, 2631 North Third street, Philadelphia, Pa., \$2,500. R. & A. J. Gilmore, Inc. (O), 2631 North Third street, Philadelphia, Pa. Stewart & Bros. (C), 2526 North Orkney street, Philadelphia, Pa. Iron on iron, 1 story, 17 feet 2 1/2 inches x 39 feet, slag roof.

Store and Dwelling, 38x40 South Fifty-second street, Philadelphia, Pa., \$1,850. Louis Winkelman (O), 38 South Fifty-second street, Philadelphia, Pa. Basch & Co. (C), 1420 South Front street, Philadelphia, Pa. New store front, 1 story brick addition, 6x15 feet.

Store and Dwelling, 423 South Fifth street, Philadelphia, Pa., \$350. Samuel Feinstein (O), Fifth and Monroe streets, Philadelphia, Pa. Joseph Farbstien (C), 908 Walnut street, Philadelphia, Pa. New bulk.

Office, Robinson and Haverford avenue, Philadelphia, Pa., \$300. Cave Ice Manufacturing Co. (O), Robinson and Haverford avenue. J. C. Cave (C), on premises. Brick addition, 16x16 feet, slag roof.

Battery House, Eightieth and Bartram avenue, Philadelphia, Pa., \$585. P. & R. Railroad Co. (O and C), Reading Terminal, Philadelphia, Pa. Brick, 1 story, 15x20 feet, stone foundation.

Kitchen, 1507 Passyunk avenue, Philadelphia, Pa., \$300. John Curcio (O), on premises. Chas. Testa (C), 1112 Annin street, Philadelphia. Brick, 1 story, 11 feet 6 inches x10 feet 10 inches, stone foundation.

Lumber Storage Building, Mermaid Lane and Reading R. R. Chestnut Hill, Philadelphia, Pa., \$1,000. Yarnall-Warming Co. (O), on premises. R. C. Ballinger Co. (C), 218 N. Thirteenth street, Philadelphia. Frame, 16x18 feet.

Restaurant, 907 Race street, Philadelphia, Pa., \$1,000. Far East Chinese Restaurant (O), on premises. A. P. Fraim (C), 319 Market street, Philadelphia. Interior changes, new cooking range.

Factory, 214 South Twenty-fourth street, Philadelphia, Pa., \$1,240. Chas. W. Hires (O), 210 South Twenty-fourth street, Philadelphia. C. P. Roeger (C), 51 North Hutchinson street, Philadelphia. Three ventilators on top of building.

Demolition of Fire Damages, 1736-46 North Broad street, Philadelphia, Pa. John B. Deaver (O), Lankenau Hospital, Philadelphia, Pa. Wm. Steel & Sons Co. (C), Sixteenth and Parkway, Philadelphia.

Store and Dwelling, 1624 East Passyunk avenue, Philadelphia, Pa., \$650. Max Sherr (O), on premises. Frank Kaiser (C), 1522 South Sixth street, Philadelphia, Pa. Brick, flush bulk.

Tenement House, 1025 Wallace street, Philadelphia, Pa., \$2,600. I. M. Rubincum (O), Oak Lane. J. A. Dunkelberg (C), 71 Herman street, Philadelphia. Alterations to partitions.

Garage, 6130 Columbia avenue, Philadelphia, Pa., \$1,400. John C. McClatchey (O and C), 848 Land Title Building, Philadelphia. Stone, 18x21 feet, slate roof.

Store and Dwelling, 314 and 316 South Sixtieth street, Philadelphia, Pa., \$1,700. John F. Graham (O), 5440 Lansdowne avenue, Philadelphia, Pa. Joseph J. Laver (C), 1453 N. Fifth street, Philadelphia. Hot water heating plant.

Store and Dwelling, Emily and Moyamensing avenue, Philadelphia, Pa., \$500. Wm. Haller (O), on premises. M. Losse (C), 816 Winton street, Philadelphia. Repair fire damages.

Day Nursery, 364-366 Snyder avenue, Philadelphia, Pa., \$140. Down Town Hebrew Day Nursery (O), 364 Snyder avenue, Philadelphia, Pa. Samuel Keyser (C), 2124 South Sixth street, Philadelphia. New radiator and new boiler.

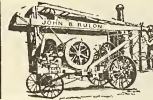
Garage, Haddington and Fifty-ninth streets, Philadelphia, Pa., \$400. Joseph P. Savide (O and C), 1700 North Fifty-ninth street, Philadelphia. Brick, 1 story, 12x16 feet, tin roof.

Store and Dwelling, Sixtieth and Sansom street, Philadelphia, Pa., \$900. G. W. Mukletian (O), 6164 Walnut street, Philadelphia. Harry Seligman (C), 1837 South Second st., Philadelphia. Hot water heating system.

Bottle Washing Room, 1448-50 N. Eleventh street, \$4,000. Supple Wills-Jones Co. (O), Twenty-sixth and Jefferson streets, Philadelphia. Geo. Kessler Contracting Co. (C), 331 Drexel Building, Philadelphia. Brick, 3 stories, 32x70 feet, stone foundation, slag roof.

Restaurant, Ludlow and Thirty-third st.,

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Philadelphia, Pa., \$5,000. Croft & Allen (O), Thirty-second and Market streets, Philadelphia. Jacob Meyers & Sons (C), Witherspoon Building, Philadelphia. Interior alterations, bridge and stairway.

Picture Show, 4910 Wayne avenue, Philadelphia, Pa., \$1,000. L. Albert (O), Clappier street, Philadelphia. John Roman (C), 4908 Wayne avenue. Build up four doors, brick.

Tank, north side of Church Lane, east of Elton avenue, Philadelphia, Pa. Blaisdell Paper Pencil Co. (O), Amos Hall & Sons (C), Twenty-first and Cambria streets, Philadelphia, 15,000 gallon capacity, wood.

Tanks (4), southwest corner of Nineteenth and Allegheny avenue, Philadelphia, Pa. Electric Storage Co. (O), Amos Hall & Sons Co. (C), Twenty-first and Cambria streets, 7,206 gallons capacity.

Garage, 6123 Oxford street, Philadelphia, Pa., \$1,650. Mary C. Bates (O), on premises. Daniel E. Hogan (C), 6043 Columbia avenue, Philadelphia. Brick and stone, 21x22 feet, stone foundation, slate roof, metal cornice.

Dwelling, 1766 Taney street, Philadelphia, Pa., \$300. A. Schweiker (O), 1718 North Twenty-sixth street, Philadelphia. F. I. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. New gables.

Store and Dwelling, 2623-25 Columbia avenue, Philadelphia, Pa., \$345. S. W. MacPetridge (O), on premises. F. I. Wintz (C), 1618 North Twenty-seventh street, Philadelphia. Brick alterations.

Factory, 524 North Twenty-sixth street, Philadelphia, Pa., \$1,500. Philadelphia Belt-ing Co. (O), Sixth and Spring Garden streets, Philadelphia. W. J. Gruhler (C), 219 High street, Philadelphia. New metal frame, reinforcement of present floor, cement floor.

Open Shelter Shed, northwest corner of Frank and Berks streets, Philadelphia, Pa. Wm. M. Lloyd (O), Pier 69, North Wharves. J. Morris Daniels (C), 252 South Juniper st., Philadelphia. 15 feet 3 inches x36 feet.

Store and Dwelling, southeast corner of Second and Kenilworth streets, Philadelphia, Pa., \$5,300. J. Gold (O), on premises. M. Cyinder (C), 521 Mifflin street, Philadelphia. Brick, 2 stories, 17 feet 6 inches x 40 feet, stone foundation, slag roof, metal cornice, hot water heat.

Store and Dwelling, 3341 Woodland avenue, Philadelphia, Pa., \$500. Alex Adams (O), 3623 North Eleventh street, Philadelphia. J. Hughes (C), 38 South Thirty-third street, Philadelphia. Repair brick side wall.

Repair Shop, Frankford avenue and Bridge street, Philadelphia, Pa., \$45,000. Philadelphia Rapid Transit Co. (O and C), 810 Dauphin street, Philadelphia. Interior alterations, in-

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HEATING

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stalling two five-ton electric cranes, steel runways and brick piers, hollow tile partitions. Kitchen, 1204 Moore street, Philadelphia, Pa., \$1,000. Vincenzo Mareucci (O), 1204 Market street. P. Feti (O), southwest corner of Twentieth street, Philadelphia. Rear brick addition, 1 story, 10x10 feet, stone foundation, slag roof.

Theatre and Stores, Broad and Montgomery avenue, Philadelphia, Pa., \$20,000. Anna H. J. Taylor, guardian (O), 527 Lafayette Building. Frank E. English (C), 1608 North Carlisle street, Philadelphia. Repair fire damage.

Warehouse, 1024 Buttonwood street, Philadelphia, Pa., \$1,000. Elliot Fisher Co., Ltd. (O), on premises. Harry H. Yeager (C), 4430 North Ninth street, Philadelphia. General interior alterations, skylight and new elevator.

Mill Tank, northwest corner of Sixteenth and Hamilton streets, Philadelphia, Pa. Wm. Sellers Co. (O), on premises. Amos H. Hall & Sons (S), Second and Cambria streets, Philadelphia. 120,000 gallons.

Garage, northeast corner of Twenty-third and South streets, Philadelphia, Pa., \$12,000. E. M. Harris (O and C), 2220 Chestnut street, Philadelphia. Brick, 1 story, 90x155 feet, slag roof.

Shop, Drants Alley, east of Baker street, Philadelphia, Pa., \$400. C. F. Moye (O) Drant Alley. J. J. Hurly (C), 503 East Market street, Philadelphia. Brick, 22x24 feet, 1 story, stone foundation, slag roof.

Machine Shop, Richmond and Norris streets, Philadelphia, \$65,000. Wm. Cramp & Sons S. and E. Co. (O), Richmond and Norris streets. F. A. Harris & Co. (C), 845 North Nineteenth street, Philadelphia. Brick, 1 story, 215x84 feet 9 inches x37 feet, steel columns, N. C. sheathing, slag roof.

Steel Stack, northeast corner of Seventh and Chestnut streets, Philadelphia, Pa., \$350. Penn Co. (O), 517 Chestnut street, Philadelphia. Philadelphia Boiler Works (C), 1737 Filbert street, Philadelphia. 14 inches diameter, 60 feet high.

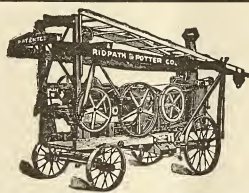
Office Building, southeast corner of Thirty-second and Poynton avenue, Philadelphia, Pa., \$10,000. The Pennsylvania R. R. Co. (O), Broad Street Station. Wm. McCouch (C), 402 Commercial Trust Building. Brick, 1 story, 22x86 feet, concrete foundation.

Dwelling, 135 East Durham street, Philadelphia, Pa., \$500. M. Hitchcock (O), 135 East Durham street. Wm. Steel & Sons Co. (C), 1600 Arch street, Philadelphia. Sleeping porch, iron on iron, 13x6 feet.

Kitchen, 2516 North Patton street, Philadelphia, Pa., \$300. Walter Little (O and C), 2561 North Patton street. Brick, 13x7 feet, tin roof.

Garage, Carlisle and Oxford streets, Philadelphia, Pa., \$2,400. E. Cadwallader (O), Delta Spring Mill, Frankford. A. H. Spenard (C), 822 Wood street, Philadelphia. Repair fire damages, new roof and new windows.

Storage Building, 1623 North America st., Philadelphia, Pa., \$2,450. Fleck Bros. Co. (C), 50 North Fifth street. Geo. W. Roberts (C), 1105 East Chelton avenue. New iron girders, brick addition, 1 story, 18x75 feet.



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Dye House, Jasper and York streets, Philadelphia, Pa., \$500. Thos. Buck Hosiery Co. (O), on premises. Wm. Steel & Sons (C), 1600 Arch street. New plank, slag roof.

ESSENTIALS IN PLANNING INDUSTRIAL HOUSES

(Continued from Page 600)

The real merits of the question lie in the factors of beauty and economy which have been found to be equally vital.

There is no question but that the day of the old, flimsy three-decker, and other such shacks, is past. The working man has come to demand a certain amount of beauty and comfort as his right, and it is now our problem to see how this can be most simply and economically provided.

Beauty, as considered in relation to industrial housing, does not mean ornamentation. On the contrary, the best and most permanently satisfactory results will always be found to come from simple designs. Hence, we may say that a simple house, with good proportions and sturdy, unpretentious lines, not aping something which it is not, a house thoroughly livable, should be the ideal of the industrial housing designer. He should first of all, consider the plan. This is the chief interest of the housewife, also, and is actually the thing which makes or mars the house. There must be no waste floor space; all the essentials must be provided; and the cost of the completed house must not be forgotten.

Essentials of a Workman's Home.

What are the essentials of a workman's home? It may be said that such a home should provide for the general functions of living—for the meeting place of the family, for cooking, eating, sleeping, bathing and the like. In providing for those things there are certain elements which are fixed, while others are more variable. In these days the necessity of a living room is not denied, but it is possible to combine its functions with those of the

dining room, thus eliminating the expense incidental to planning for these rooms separately. In other instances it may be found preferable to combine the dining room with the kitchen. In this case it is usually desirable to provide a sort of alcove for the purpose, often with built-in furniture, which is extremely attractive and saves the working man considerable expense in furnishing. A simple bench at either side and a broad table with sturdy supports at the ends is all that is required. When these are painted, say a soft green or a creamy yellow, they become very charming, and make the dining alcove more desirable oftentimes than the conventional, stereotyped dining room. When dressers and sink are provided in the kitchen, the pantry may usually be omitted.

The second floor requirements are not so elastic. A minimum of two bedrooms is usually necessary. The provision of a bathroom should be unquestioned. When bedrooms are provided only for members of the family they need not be larger than to contain the necessary furniture of bed, wardrobe, chair and dressing table; when closets are planned for, the wardrobe may be omitted. In the event that there is a bedroom for a lodger, it must be somewhat larger, since it constitutes his living as well as his sleeping quarters.

Are Fireplaces and Cellars Necessary?

The question of providing fireplaces and cellars is the most variable of all, depending first on the climate, and secondly on the size of the project (whether or not there would be greater economy in a central heating plant), and thirdly whether or not the worker to be housed is of a type to appreciate the responsibilities incidental to the care of a furnace. These questions can be met only as they arise, although it must be remembered that where cellar space is not provided some other arrangement must be made for the housing of fuel, tools and the other utilities usually kept in basements. Sometimes a large, covered rear entry will serve the purpose.

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In other cases the old-fashioned woodshed will be built, but for average purposes it is safe to say that the cellar meets the need better than any other arrangement.

With regard to the aesthetic elements of the design, it should be remembered that this depends in large part on the innate ability of the designer. One cannot make hard and fast rules nor lay down rigid principles that will inevitably result in attractive houses. Good proportions, however, and simplicity in style may be said to count for more than anything else. Beyond that, planting about the house, particularly in the form of shrubbery to mark the entrances, and to fill unsightly corners if there are any, will help a great deal. Window boxes are also very attractive.

When it is possible to provide space for a small garden this should be done. It will not only effect economies in the workman's life, but will give him an added interest in his home and help to bind him pleasantly to his surroundings.

To summarize the phases of this sort of design, it may be said that, with a due regard for necessary economies, the solution of the problem lies in evolving houses which will be homes, not barracks, in which the worker will be content, and in which he will find those things that make his social and domestic environment complete.—C. J. Thompson in "Building Age."

THE LIBERTY FIELD HOSPITAL WARD.

In connection with recent efforts of many large organizations voluntarily to utilize their staffs and equipment for purposes aiding the prosecution of the war, attention should be called at this time to the Liberty Field Hospital Ward, designed for the American Museum of Natural History by its president, Mr. Henry Fairfield Osborn, assisted by Mr. Harry F. Beers, Superintendent of Construction of the Museum. An illustrated pamphlet of the building has been issued by the Museum of Natural History, lucidly presenting plans, elevations, sections and details, with photographs of the scale model, which may be seen at the Museum in West Seventy-seventh street, where inquiries may be addressed to the Director.

Many features exhibited by the design render it noteworthy among the numerous arrangements of hospital buildings developed by the war in Europe, and those responsible for its design have incorporated into it certain of the best points found in the latest and most improved field hospitals in use by the French, English, Canadian and American military forces.

One of the dominant ideas in the Liberty Field Hospital Ward is to facilitate the ready exposure to the open air of any or all of its occupants, looking toward a greatly increased rapidity in their recovery—the beneficial effect of such treatment having been notably

demonstrated when employed at the First Eastern General Hospital, Cambridge, England.

A second and equally important idea is the construction of the ward in units of five-foot lengths, each complete in itself, with the result that the units are portable and may be quickly erected; that the building is elastic and may be built to any length desired; and last, but not least, that these units may at the close of the war be used for purposes of reconstruction in the devastated portions of the battle areas of France and Belgium. To many this last fact will appeal as of great interest, serving as an antidote for a small part of the economic waste exhibited by the utter destruction of material created to fill a temporary need. These units may be assembled into dwellings of a size adapted to individual families, and at very slight expense be rendered permanent homes for repatriated Frenchmen.

The construction is extremely simple, and with few exceptions all parts of the building are fabricated, numbered, packed and shipped ready to be set up by the hands of unskilled labor. The main sills and floor beams of the building rest upon concrete piers one foot square. Posts of sufficient strength mark each five-foot division and carry the weight of the light steel trusses.

The panels, fitted between the posts, are identical and may be pushed out onto the sliding track which runs the length of the building, and slid back one over the other in such a way that two whole bays may be opened at the same time at intervals of their length; or, if desired, the panels may all be pushed to the end of the building and stored back to face. In this way both sides of the building may be completely open to the air. The windows in these panels, since they are similarly placed, correspond when one panel is pushed back over another and no obstruction is offered to the passage of light.

In the Overseas Hospital Ward in use by the United States Government a number of bays of the side walls are so hinged as to swing outward, forming ramps to the ground. This arrangement is desirable in case of fire or other emergency when it is necessary to evacuate the hospital quickly, and such a suggestion might well be incorporated into the projected Liberty Field Hospital Ward where no such provision appears.

The construction of the panels themselves is of comparative permanence. The small air space, covered on both sides with tar paper, over which are applied the exterior and interior wall finishes, provides sufficient insulation against extremes of temperature. Above the sliding panels are stationary panels of like construction fitted between the posts. The floor panels are made up in much the same manner to protect against dampness, heat and cold. The interior partitions are of pine construction, covered with comboard.

The floors of the porch and ward are at the same level, permitting the comfortable moving of patients from one to the other.

The height of the interior from floor to hung ceiling is 11 feet 6 inches, with an air space above to the ridge of the roof six feet at its centre. Ventilating devices in the ceiling are manipulated from within by hooks and communicate with louvered openings above the roof. This ceiling treatment would seem to be an improvement upon that of the Overseas Ward, in that the generous air space with end-to-end ventilation offers more protection against the summer heat than does the open roof of the Overseas Ward, while the double ventilators give greater protection from outside dust.

A ten-foot porch, running along the whole length of one side and across the end of the building, is covered by a canvas awning which may be rolled back in sections on the supporting rafters.

The roof truss is ingeniously arranged in three parts: the steel portion, which, economically designed in its tension and compression members, may be folded for shipment like a great jack-knife; and the two wooden rafters, which are bolted to the steel when assembled and are notched to fit properly to the top of the side walls of its centre.

The recommended size for the ward is one hundred and fifty feet by eleven feet six inches; floor to peak of roof, seventeen feet six inches. In the ward may be accommodated thirty-two beds, with an additional two in the isolation room, and one-half of this number of beds may be placed on the open porch at one time. In the service portion, occupying one end of the building, are a diet kitchen, isolation room, nurses' room, utility room, toilet and lavatory, bath and surgical dressing room and linen room.

An important consideration in such work is the weight and transportation. The statistics with the layout give the total weight of the completed ward (150 feet in length) as 114,425 pounds (cubage 4,454), and state that one such ward can be transported to the destination in seventeen standard United States Liberty trucks, while it is believed that a more economical method might be possible in dealing with the material in gross. The estimated cost of thirty Liberty Field Hospital Wards, with space for 1,020 beds, prices for labor and material prevailing April 10, 1918, ranges from \$231,000 to \$292,000 complete, or about \$8,000 per ward.

The contribution of so much thought and labor on the part of the designers is significant of the unselfish aid which is being offered to the Government in its tremendous work of preparing for a vigorous and successful carrying on of the war, and it is to be hoped that prompt use will be made of the suggestions contained in the design, if such has not already been the case. To the ad-

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vantages of unit construction and the fact that the units may be used so successfully for dwellings after the war are added its adaptability for use as Army Red Cross hospitals, field buildings or convalescent wards, and for Y. M. C. A. canteen work under both winter and summer climatic conditions.—Charles Over Cornelius, in the "Architectural Record."

TOWN-PLANNING.

Town planning is just now a much used and much misunderstood word. The one who practices town-planning is referred to as a "town-planner," as if this were a recognized profession or occupation. As a matter of fact what is included in the term is a very complex group of problems that belong in no one profession, and which require for their solution the help of many professions and advice from a wide field of experts.

Broadly speaking, town-planning may be divided into two quite distinct parts. One is laying out a town established in the open country, or it may be a suburb developed in the open country, but near, or forming a part of, a town. In this case the problem includes all the necessities of a complete community, but is wholly, or to a large extent, unhampered by existing town conditions. The other is town-planning in an already established community. In this case the problem includes a comprehensive study and analysis of the existing conditions; to find what is good and essential to retain, what is bad and must be remedied, and what is bad and must be endured.

Anyone who has had experience with municipal work, whether it be the board of health, the street commissioners, the school committee, or the trustees of libraries or hospitals, will recognize at once how difficult and complex a task it is to make municipal improvements. Each is so involved with all the others, and co-operation is so difficult, unless there is some supreme authority to demand, and in a position to enforce, co-operation.

At the present time the Government, through the United States Housing Corporation, is carrying on both branches of town-planning, building new communities and making substantial changes in, and additions to, old communities; and the Government is in a position of supreme authority. Of the two problems the latter is undoubtedly the more complex and the more difficult. If, then, one considers first the simpler of the two, the new community, one may see what is expected of the man who is called a town-planner.

To lay a town well requires knowledge of topography, drainage, water supply, street planning and construction, the planning and construction of all buildings which go to make up a town, and the proper relation of all these buildings to each other, parks, playgrounds, transportation, industrial, social and

economic problems. It is a large order for any one man, and, as a matter of fact, no one man knows all these fields and is competent to solve all these problems.

If this is true of the new community planned from the start, it is infinitely more true of the substantial addition to the old community, for here one must add to the difficulty of solving these problems on virgin ground, all the hampering conditions of that which already exists.

In all complex work requiring many minds and many points of view, it is essential to success to have a single control. Some one authority must be the final one; some one central control must assemble, co-ordinate, compare, and arrive at the eventual compromise (a bad word to use, but one which really expresses the usual best result) which establishes the final town plan.

It is evident that one needs many men of many professions to study the different problems. Most of them concern the architect. Most of them are problems which he is in the habit of studying. Many concern the engineer. These two recognized professions have certainly clearly defined work. Besides these two there is the profession of the landscape architect, whose field is less clearly defined but is concerned chiefly with topography, parks, and gardens. Then there are questions which involve railroads, transportation, education, hygiene, social and industrial problems, and here one must have the help of physicians, lawyers, railroad men, real estate men, social workers, and educators.

In all this crowd of experts, who is the town-planner? The one who gathers up all the information and makes the final decision must obviously be a man with wide vision and good clear common sense. These are the essential qualities for almost any professional work. Professional men value rightly their purely technical and professional education, but most of it they forget in practice. Most of what they learned in the schools is obsolete in their years of mature work, and what they rely on most is the exercise of their well-trained brains. This is but another way of saying that common sense, well-balanced judgment, based on wide experience, and, above all, based on a profound belief in the unreliability of scientific "facts," is the essential in the problem of town-planning, as in any other complex problem.

Of the various professional men whose knowledge is needed for the solution of a town-planning problem, the architect is the only one who has had experience, more or less complete, in all the phases of the work. Topography, streets, drainage, he must know, superficially at least; buildings of all kinds are his regular work, and these involve study connected with hygiene, education, and recreation, for he plans hospitals, schools, and theatres, and plans playgrounds and parks. As a matter of fact, however, almost any thor-

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oughly well-trained mind would be as fit as the architectural mind to weigh, sift, and decide, when the facts are assembled. The man who did this would not therefore be entitled to be called a town-planner, nor is a profession, independent of others, hereby established. If anyone is entitled to be called a town-planner it would be the man who assembles the data and puts them in graphic form, and this must be the architect, for, primarily, the problem is one of buildings.

There seems, however, no real need to invent a new title for this particular phase of architecture, which cannot be divided, as the medical profession is, into groups of specialists. Specializing is always narrowing. The orthopedic surgeon has forgotten all he ever knew about digestion. The architect who calls himself a specialist in schools will generally be found to be poor in other fields and probably not first-class in schools. The best architects are, without exception, those who habitually study and solve every kind of problem which comes their way. The problems connected with town-planning are in every respect the kind of problems the architect is in the habit of studying. A modern commercial building, whether it be an office building or a city hall, involves every kind of engineering. A large country house involves topography, roads, drainage, and water. There are innumerable variations of the problems, which give the architect an insight into medical, educational, social, and industrial questions.

The architect is, therefore, the one best fitted by training and experience to gather together and co-ordinate the miscellaneous information necessary to the solution of the plan for a new town or a new suburb, but it does not therefore follow that the architect is, or ought to be, the final judge of his own solution, or that it would necessarily be another architect who would render that decision.

The United States Housing Corporation is organized on this basis. The chief is a builder of wide experience, whose standing is recognized throughout the country. The General Manager, under whose control are the architectural, engineering, landscape, contractual real estate and legal divisions, is an architect. This is absolutely sound and should give good results.

This country is new at the business of planning industrial or any other kind of communities. Our old towns, like Topsy, "just grewed;" our new towns, under the guidance of unimaginative engineers, seared a grid-iron plan on land irrespective of its nature. When we experimented with model towns we failed, for a variety of reasons. We have, therefore, no background of experience, still less of success, that warrants the assumption by anyone of the title of town-planner. Until we have accomplished something that is reasonably successful, that is within hailing distance of what England has done, it would, per-

haps, be just as well to be content with our present professional titles and not attempt to claim that of town-planner.—R. Clipston Sturgis, in "Journal of A. I. A."

WOMEN CARPENTERS IN FRANCE.

Mr. E. H. Hewitt, a Minneapolis architect, who went to France last spring to take charge of the construction of Y. M. C. A. "huts" for the French armies, has returned to Minneapolis and recently related some of his experiences to St. Mark's Forum. Before leaving France he had erected more than 500 of these "huts." Mr. Hewitt said:

"When I first reached France a serious situation confronted me. The general plan was to construct hundreds of these huts. Some were to be directly behind the lines and others were to be farther to the rear.

"The principal difficulty was to get labor. There isn't a skilled mechanic unoccupied in France. Every boy and man above the age of 19 years, who is able-bodied, is in the army. The women are taking their places. On the 'Y' huts we used women carpenters—and they really knew how to drive nails straight.

"Each hut is 20 by 100 feet in size. It is built exactly like barracks. The question of lighting was quite serious. One of these buildings would have only six 16-candle-power bulbs at one time for lighting purposes. The walls were painted white and that conserved lights and helped considerably."

CEMENT PRODUCTION IN 1917.

Statistics of the cement industry in the United States in 1917, prepared by the United States Geological Survey, indicate that the total shipments of Portland cement from the mills amounted to 90,703,474 barrels, valued in bulk at the mills at \$122,745,088. This represents a decrease in quantity of 4.1 per cent. and an increase in value of 17.8 per cent. compared with 1916.

The production of Portland cement in 1917 was 92,814,202 barrels, compared with 91,521,198 barrels in 1916, an increase of 1.4 per cent. This production holds the record, the next highest output, 92,097,131 barrels, having been in 1913.

Not only was the largest output of Portland cement made in 1917, but the factory price received during the year throughout the country was high.

You owe it to yourself to keep in touch with what is going on in the trade, and you can do this only by becoming a subscriber to and regular reader of your trade paper. If you are not a regular reader of the Builder's Guide you should be. The cost is not excessive. A five-spot insures it fifty-two times in the course of a year.

The Page "Ad"

"I like the clean, outstanding appeal of the page ad," said an advertiser recently," but I'll be frank to say that I've never been able to convince myself that it can be made to pay."

"Have you ever tried out a whole page?" he was asked.

No. He hadn't. But he knew what a page of space would cost, and he couldn't get away from a certain overhang of doubt that the additional results would prove commensurate with the extra outlay.

We mentioned Wanamaker, who uses a page a day regularly, varying this program now and then by making it two pages.

Oh, yes, of course. But then Wanamaker's case was quite different.

We asked him to point out "how" and "why."

The truth of the matter is that the page ad is just as much more effective than the small ad as the big show window is more effective than the small show window.

To be sure, in the case both of the ad and the window a whole lot necessarily depends on just what you put into them and how you dress it up.

It wouldn't be good business to buy a page of space in order to work off a string of poor sales-talk.

But, assuming that the sales-talk is "right" and the article it is designed to sell an article that has real merit and utility, the page ad is actually the short cut to results.

The first object of any ad is to get the attention of the reader.

Nothing does this more effectually than the page announcement.

We have in mind an advertiser who slips a page space into his regular schedule now and then just as an interest-reviver.

He tells us it pays big.

Whether it would pay as handsomely in your case, we are not in a position to say.

Why not try it out!

The cost is not excessive.

Call Mr. L. S. DeLone.

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In Continuous Publication 30 Years
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 Real Estate Trust Bldg., Phila.
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 John B. Rulon. 1355 Colwyn st., Phila.
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1792

1918

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126th Annual Statement	December 31, 1917
Cash Capital	\$ 4,000,000.00
Reserve for Premiums	10,630,740.40
Reserve for Losses	4,419,000.00
Reserve for Taxes	950,000.00
Reserve for Sundries	160,000.00
Surplus	8,317,502.26
TOTAL	\$28,477,242.66

Surplus to Policyholders	\$ 12,317,502.26
Losses Paid Since Organization	192,518,273.33

The Oldest American Stock Insurance Company

Fire Insurance	Automobile	Cotton Insurance
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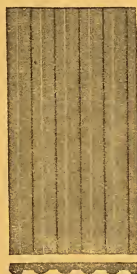
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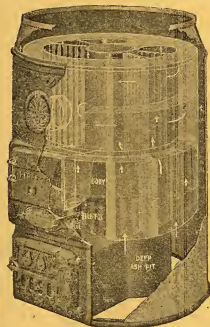
Builders' Guide

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Vol. XXXIII., No. 45
November 6, 1918

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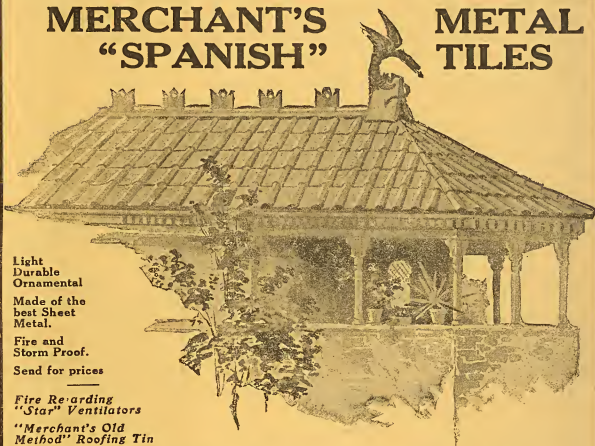


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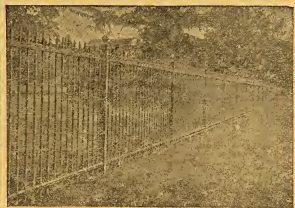
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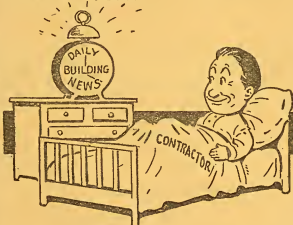
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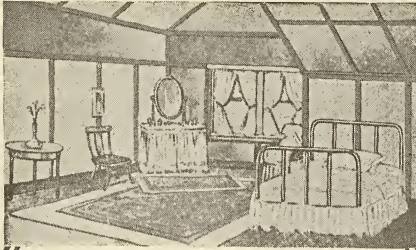
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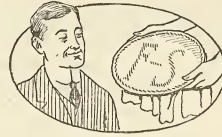
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(155)

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This Office has been occupied by the Secretary and is now released by his removal to another location.

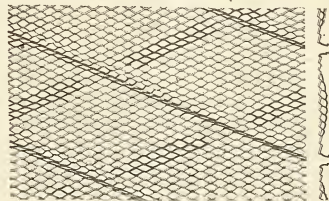
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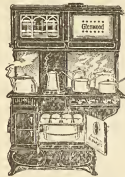
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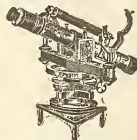
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 45

PHILADELPHIA
November 6, 1918

BUILDERS' GUIDE

FORMERLY

The Philadelphia Real Estate Record
and Builders' Guide
PUBLISHED WEEKLY

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

PUBLISHED BY

Building News Publishing Company, Inc.
PERRY BUILDING, PHILADELPHIA
Washington Office, McLachlen Bank Bldg.

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As The Editor Sees It



IN a recent issue of THE GUIDE we emphasized the opinion of N. F. Hoggson concerning the Industrial Housing movement. This movement is a direct outcome of the war needs of the country but, as Mr. Hoggson says, the problem of industrial housing will go on long after the war has ceased. In connection with this great problem comes the larger one of town planning, which, in reality, includes that of housing. The importance of town planning in relation to the efficiency of labor and the general life of the community is worthily set forth by Thomas Adams, F. S. T., Town Planning Adviser to the Conservation Commission of Canada in "Town Planning and Planning." We print the article in full elsewhere in this issue.

* * *

WAR has taught us many lessons in self-denial, sacrifice and economy. We patch our old shoes, we clean and press our old clothes, we manage on half our "necessary" amount of sugar and we forego "absolutely necessary" building and make repairs instead. This very important phase of conservation in the building has been practically overlooked according to N. F. Hoggson, who says:

Today, instead of ruthlessly tearing down honestly built, substantial structures, we are looking them over with an eye to adapting them, by skillful alterations, to serve present needs.

A great number of business buildings throughout the country are being mod-

ernized and made over into up-to-date structures through the art of remodeling. This is particularly true in regard to bank buildings. Banks have enjoyed an unprecedented rush of business, and have not only expanded their own departments but they have added Liberty Loan departments to aid the Government. The increased business has caused them to become cramped for room. Additional space, better facilities, enlarged accommodations, are imperative.

* * *

The labor problem continues to need adjustment and the War Industries Board is doing all in its power to solve this important problem. A survey is now being planned by the United States Employment Service through the Community Labor Boards, which aims to register all artisans of certain specified type who are not engaged in war work. The need for building trades labor by the Government will doubtless adjust any unemployment in that industry at the present time. Eighty-eight industries are specified under the survey; of special interest to construction are: Building glass, electrical equipment, hardware, lumber, saw and planing mills, including mills manufacturing interior finish, paints and varnishes, plumbing supplies, and roofing materials, in addition to plants engaged in the manufacture of steel, brass, copper and tin plates.

The monthly returns will give the employment service accurate figures as to the women replacing men in the indus-

tries, the number of women laborers employed in all industries covered by the survey as well as other valuable information. Individual Community Boards are urged to make their survey as complete as possible.

* * *

IF there are among us any who doubt the need for a labor survey, such evidence as the following will convince them of the reality of the labor shortage:

"To aid in the construction of new warehouses at New Orleans to be used by the Quartermaster Corps in connection with the shipment of supplies to France, 1200 Porto Rican laborers have been brought to New Orleans on an army transport. These men represent the first consignment of a force of 30,000 Porto Ricans who have registered with the United States Employment Service office in San Juan for work in the United States. They will all be used only on construction work for the War Department, and will be stationed in southern districts where the climate is suitable for their health. Further shipments will arrive at New Orleans as rapidly as transportation becomes available."

Ideals are like stars; you will not succeed in touching them with your hands, but like the seafaring man on the desert of waters, you choose them as your guides, and, following them, you reach your destiny.—Carl Schurz.

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TOWN PLANNING AND HOUSING

All towns and cities are aggregations of people engaged in business. All cities are industrial centers and only differ in regard to the character of the industry. Hence, the first object of any scheme for improving a city should be to stimulate and to perfect sound conditions in connection with its business life, which is an essential element of its being.

The most important consideration in business was efficiency in the human factor so that healthy living conditions for the working population was the next matter of vital importance.

What then is the first object of the town plan? Is it to create boulevards, design groups of monumental buildings, or lay out park systems, and that alone? Or is it to conserve and provide for the extension of its business interests and to apply healthy conditions to the dwellings of its workers, and incidentally to secure the monumental, the beautiful and the ornamental? Has there not been a misapprehension as to what town planning means because we have ignored the main factors which constitute the town?

There are men who think interference with what they call natural growth and any kind of originality is a sin. To them, town planning, and even projects for improvement of housing conditions are visionary; they look to individual regeneration for all measures of reform. These men are unsound in their judgment because they fail to appreciate the fact that the city and homes which constitute part of the city, are artificial creations, and that in all things artificial we have to improve as we progress and regulate as we grow.

There are others who think that all things fanciful and picturesque are fads, therefore town planning is a fad. That is because they may have failed to inquire what town planning is or have been misled as to its meaning.

FOUNDATION OF CITY IS THE EFFICIENT WORKSHOP AND HEALTHY HOME.

The frequent assumption that town planning only relates to the aesthetic side of city life and does not enter directly into its business, its ethical and its public health conditions is responsible for this error. It is desirable the citizens should aim at making their city beautiful, that they should endeavor to give expression in fine buildings and streets to their civic ideals, but after all these things are only the coping stones of the city structure—of which the foundation is the efficient workshop and the healthy home.

The order, therefore, in which town planning would be considered, is:

1. Industry and external transportation.
2. Healthy living and home conditions.
3. Internal transportation.
4. Markets and food supply.
5. Education.
6. Recreation.
7. Civic centers and monumental buildings.

These are the factors and the order in which they should be considered in connection with the constructive design of a city. We must also keep in mind that the city is a combination of social units. The social-unit of the city is the family and not the individual. The family life is important both as the basis for the efficiency of the worker and the integrity and justice of the civic administration. We have also to remember that the city is not only a combination of social units, but is part of a larger social structure. The city is organically related to the federation of states. Moreover we have to take into account the respect which is due to established interests; the questions of the financial adjustments between the rights of the public and the rights of the individual. So town planning enters into the administration and economic aspects of the city, its relation on the one hand to the interests of the citizen and the interests of the property, and on the other hand to the interests of the State of which it is part. Those who own property should be protected, but they should be made to perform their duties as well as to claim their rights, and no right should exist in anything that demoralizes or degrades the people.

TOWN PLANNING AND GROWTH.

We see then how broad-based town planning is, as it must be if it is to be both a science and an art. We see also that the improvement of housing and sanitary conditions is not detached from town planning but is an essential part of it.

The proper time to plan most existing cities as a whole has passed, but we can plan the portion that is likely to be built upon in the next forty or fifty years. Up to the present it has been developed anyhow. When Dr. Brown asked the little girl, "Who made you?" she said, "God made me so far"—indicating her baby stature—"and I grew the rest myself." The same may be said of the average city. But a city is not really a growth at all, for proper growth follows the lines of some plan; witness the tree or the child in nature. What our cities really do is to expand by accretion.

Now the fact that we did not begin

in time to plan the city in which we are interested is no reason for not beginning today; nor is the fact that our forefathers had not the opportunity and were not gifted with the prescience to plan the city fifty years ago, a reason for blaming them and taking flattering unction to our souls that things cannot be improved now. Unlike them, we have the mistakes of the past to guide us and therefore have greater responsibility.

TOWN PLANNING AND LABOR.

It is said, I think in error, that manufacturers sometimes assume that it pays them to have slums because it enables them to obtain cheap and dependent casual labor. That is a fallacy because there is really no dearer labor than the casual labor of the slums, which costs the business man more indirectly than directly and at the same time injures the nation.

Town planning is essential in the interests of industry, in order to regulate that growth and to provide healthy conditions for the growing army of workers. It is essential in order that our huge expenditure in wages may bring in the largest return in efficient labor; it is essential in order that the laborers may grow up to be good and useful citizens. You cannot divorce manufacturing from civic interests or civic responsibilities any more than you can plan a town without regard to the manufacturing interests. Our growth in manufacturing, or increasing urban population, and our growing expenditure in wages all demand that we should apply foresight and intelligence to the problems of city extension and to the securing of better living condition for the workers.

Town planning i. e., the laying out of all undeveloped land around the city which is likely to be built upon in the next thirty or forty years, need cost little to the present generation beyond the cost of preparing the plan, a matter of \$40,000 to \$50,000 perhaps; but the matter of replanning the parts of the city already developed can only be done gradually. But we ought to have a scheme to work to and not proceed on to the present wasteful and haphazard method. To plan new areas is to prevent bad conditions, to replan areas already built upon is more limited in its scope and has for its object the remedying of existing bad conditions. Prevention is better and cheaper than cure, but in the face of the evils which have been allowed to grow up we must face some expenditure in curing them. An equally urgent duty and one which will cost little is to prevent the recurrence of those evils in future.

TOWN PLANNING AND SLUMS.

In Britain, it has been found from

(Continued on Page 617.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Apartment House (alt.), 2013 Pine street, Philadelphia. Architect, name withheld. Owner, name withheld. General alterations (interior), steam or hot water heating, electric lighting, tile work, composition and parquetry floors, plastering, painting, mill work, etc. Ketcham & McQuade, 1029 Brown street, are taking sub-bids.

Parish House, Eighty-fifth and Gibson ave., Philadelphia. Architect, Bailey & Bassett, 421 Chestnut street, Philadelphia. Owner, St. Ciprian Parish, care Architects. Stone and brick, 1 story, 61x50 feet, stone foundations, slag roof, cement floors, roof ventilators, waterproofing. Architects taking bids November 4th. Smith-Hardican, 1606 Cherry street, are figuring.

Factory, Southeast Corner Jenks and Bath streets, \$5000. Architect, private plans. Owners, Pennsylvania Forge Co., Bridesburg, Contract awarded to Wm. G. Donley, Drexel Building, Philadelphia.

Convent (add.), 2028 West Girard avenue, Philadelphia. Architect, Robert Parsons, 6119 Thompson street, Philadelphia. Owner, Nuns of St. Clare, 1904 Girard avenue. Brick and stone, 1 story, 15x39 feet, slag roof. Contract awarded to James McCann, 1704 Poplar street.

Dwellings (15), Fernhill and Abbottsford road, Philadelphia, \$56,200. Architect, Bart Tourison, Land Title Building, Philadelphia. Owner, John H. McClatchey, Land Title Building, Philadelphia. Brick, 2 stories, 16x32 feet, slag roof, hot water heating. Owner will build.

Tank Support, Church Lane and Germantown avenue, \$2000. Architect, private plans. Owners, Blaisdell Pencil Co., on premises. Supports for Tank, 15,000 gallon capacity. Contract awarded to P. M. Sax, Franklin Bank Building, Philadelphia.

Pent House and Continuation of Stairway, Alleghany avenue and Cedar street, Philadelphia. Architect, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Northeastern Hospital, Allegheny avenue and Cedar street. Brick work, slag roof, skylights, steel and slate stairs. Architect has received bids.

Residence (alt. and add.), 3634 Cliveden avenue, Germantown, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owner, Sklaroff, 712 South Second street, Philadelphia. Interior alterations and porch inclosures. Architect has received bids.

Factory, Seventieth and Kingessing avenue, Philadelphia. Architect, Paul Essick, 1345 Arch street, Philadelphia. Owners, McFarland-Meade Co., Forty-sixth and Woodland avenue, Philadelphia. Brick and mill construction, 1 story, 160x127 feet, slag roof, wood floors, hot water heating, electric lighting. Architect taking sub-bids.

Fire Station No. 23, Seventh street above Morris, Fire Station No. 10, 808 Morris st., and Municipal Repair Shop, Eleventh and

Reed streets, Philadelphia. Architect, Jos. A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, care Department of Public Safety, 215 City Hall, Philadelphia. Brick work, painting, sheet metal work, tin work (No. 23); mill work, doors, roofing tin and slag, plastering, painting and glazing, brick work (No. 10); cement work, (1) electric elevator, (1) dumbwaiter, and miscellaneous repairs (Municipal Repair Shop). Owners taking bids due November 6th at noon. Hogg Construction Co., 1634 Sansom street, Mitchell Bros., 2125 Race street, E. C. Durell, 1713 North Twenty-fourth street, and James Connor, 1317 Arch street, are figuring.

Engine House, Forty-ninth and Grays avenue, Philadelphia (East Side Yard). Architect, private plans. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Reinforced concrete, 260 feet outer circle and 120 feet inner circle. Owners are taking sub-bids.

Warehouse, 1610 Washington avenue, Philadelphia, \$4200. Architect, private plans. Owner, John G. Lorenz, 1610 Washington avenue, Philadelphia. Brick, 1 story, 70x66 feet, slag roof. Owner will build.

Garage East side of Milnor, North of Bleigh street, \$5000. Architect, private plans. Owners, Tacony Ordnance Co., on premises. Frame, 1 story, 75x18 feet and 20x7 feet, slag roof, electric lighting. Owner is building.

Warehouse Northwest Corner Tackawanna and Ruan streets, \$25,000. Architect, Peuckert and Wunder, 310 Chestnut street, Phila-

delphia. Owners, Roberts' Filter Mfg. Co., Taulane and Ruan streets, Philadelphia. Brick, 2 stories, 94x64½ feet, slag roof, concrete foundations steam heating, electric lighting cement floors, (plumbing, heating and electric work reserved). Owners will sublet.

Y. M. C. A. Building, standard specification. Owners, Bureau of Construction, National War Work Council, Y. M. C. A., 347 Madison avenue, New York City. Frame, 2 stories, 48 feet 3 inches x72 feet and 48 feet 3 inches x88 feet, ready roof, wood floors; stone foundations, steam heating, electric lighting. Owners taking bids. Warren Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Stores and Dwellings (5), Fourth street, between South and Bainbridge streets. Architect, Herman H. Kline, Sixth and Mifflin streets, Philadelphia. Owners, Garrity Bros., 750 South Juniper street, Philadelphia. Brick, 3 stories, 15x45 feet, slag roof, stone foundations, hot water heating, electric lighting, tile and marble work, metal ceilings. Plans completed. Owners are taking sub-bids.

Addition to Building No. 45, Power House Substation, additional work under Spec. 3252, Navy Yard, Philadelphia, on Submarine Battery Storage Building. Architect, private plans. Owners, U. S. Government, Navy Yard, Philadelphia. 1 story, concrete foundations, slag roof, concrete floors, rolled steel sash, roof ventilators (electric work reserved). Owners taking bids. Turner Concrete Steel Co., 1713 Sansom street, is figuring.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Boiler Room (alts.), Ninth and Noble sts., Philadelphia, \$4000. Architect, private plans. Owners, Swift & Co. on premises. Concrete, steel and brick, cement floors. Contract awarded to Monaghan & Losse, Inc., 3016 Chestnut street, Philadelphia.

Shelter Building, McCoach Playground, Philadelphia, \$835. Architect, private plans. Owners, City of Philadelphia, Board of Recreation, Room 587, City Hall. Frame, 12x 28x10 feet high, rubberoid roof, cement and wood floors, plumbing, hardware, mill work. Contract awarded to E. C. Durell, 1713 North Twenty-fourth street, Philadelphia.

Garage (Fire Repairs), 2137-39-41 West Jefferson street, Philadelphia, \$1965. Architect, private plans. Owner, S. Levin, 2213 West Jefferson street, Philadelphia. General restor-

ation. Contract awarded to Michael Kirschner, 421 Snyder avenue.

Water Plant, Southwest Corner Fifty-second and Grays avenue, \$4000. Architect, private plans. Owners, Flaga Steel and Iron Co., Fifty-second and Grays avenue. Iron and iron, 1 story, 26x35 feet. Contract awarded to Metz Structural Steel Co., Bridgeport, Pa.

Bath House (int. alts.), 433-40-42 Ludlow street, \$3,000. Architect, H. B. Weldon, 1606 Cherry street, Philadelphia. Owner, J. Bershad, Chester, Pa. Brick, 2 stories, 20x17 feet, new stairway, interior alterations. Owner will build.

Workshop, rear of 723 North Twenty-sixth street, \$1,200. Architect, private plans. Owner, J. J. Harding, 723 North Twenty-sixth street. Brick, 2 stories, 17x64 feet, slag roof. Owner will build.

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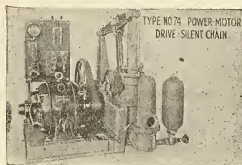
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PENNSYLVANIA Construction News

Residences (200), Eddystone, Pa. Architects, Rankin, Kellogg & Crane, 1012 Walnut street, Philadelphia. Owners, U. S. Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Brick or hollow tile and stucco, 2 stories, 16x30 feet, slate roof, steam central plans, electric lighting. Owners taking bids due November 8th. Frank G. Stewart, 1619 Sansom street, Cramp & Co., Denekla Building, Edw. Fay & Son, 2 South Mole street, Barclay White Co., 1713 Sansom street, Doyle & Co., 1519 Sansom street, Wm. Steele & Sons, Sixteenth street and Parkway, J. S. Rogers Co., Drexel Building, all of Philadelphia, and Purdy & Henderson, 45 E 17th street, Wm. Crawford, 7 East 42d street, Wm. Barstow & Co., Inc., 50 Pine street; McArthur Bros., 120 Broadway, all of New York City, and Price & Johnston, Chester, Pa., and J. E. Bunting Co., Flushing, N. Y., are figuring.

Foundation for Water Tank, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Government, care Engr., 815 Witherspoon Building, Philadelphia. Wood or concrete piling, concrete work. Lam Building Co., 1001 Wood street, low on wood piles, unit price. MacArthur Concrete Pile and Foundation Co., Stock Exchange Building, low on concrete piles, unit price.

Church, Northampton Heights, South Bethlehem, Pa. Architect, A. W. Loh, 4th and Broadway, South Bethlehem, Pa. Owner, Storak Evangelical Church, care Geo. Proko, 1701 East Third street, South Bethlehem, Pa. Brick and stone, 60x37 feet, slate roof, concrete foundations, steam heating, electric lighting, hardwood floors. Chairman taking bids. Baloch & Co., Bethlehem, Pa., are figuring.

Silk Mill, Emaus, Pa. Architect, L. S. Jacoby, Commonwealth Building, Allentown,

Pa. Owner, J. H. Frederick, Emaus, Pa. Reinforced concrete, 3 stories, 60x200 feet, slag roof, concrete foundations, hot air heating, electric lighting, wood floors, roof ventilators, fireproof stairs. Plans completed.

Engine House, Clifton Heights, Pa. Archi-

Corr Hall (alts.), Villa Nova, Pa. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, Villa Nova College, care Augustinian Order, on premises. New refectory and kitchen equipment, cabinet work, concrete work, electric work, metal lath, plastering. Contract awarded to Jacob Myers & Sons Co., Witherspoon Building, Philadelphia.

Dormitories (6) and Cafeteria, Eddystone, Pa. Architects, private plans. Owners, U. S. Department of Labor, Bureau of Industrial Housing and Transportation, U. S. Housing Corp., 613 G street, Washington, D. C. Frame, 2 stories, 14x28 feet, slate roof, yellow pine floors, electric lighting. Contract awarded to Edw. Fay & Son, 2 South Mole street, Philadelphia.

Coaling Station and Pits, Saucon Creek Yard, South Bethlehem, Pa. Architect, Samuel T. Wagner, Reading Terminal, Philadelphia. Owners, Philadelphia and Reading R.R. Co., Reading Terminal, Philadelphia. Reinforced concrete and steel. Contract awarded to Surety Eng. Co., 30 Church street, New York City.

Shop, Chambersburg, Pa. Architect, private

plans. Owners, Cumberland Valley Railroad Co., Harrisburg, Pa. Brick, 1 story, 86x210 feet, slag roof, cement floors, steam heating, electric lighting, rolled steel sash. Contract awarded to Austin Co., Bulletin Bldg., Philadelphia.

Academy Building (alts.), Villa Nova, Pa. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Villa Nova College, care Augustinian Order, on premises. General interior alterations to refectory, kitchen, community room, reception room, laboratory, bathrooms, plumbing and new fixtures. Contract awarded to Jacob Myers & Sons Co., Witherspoon Building, Philadelphia.

Residences (additional 200), Chester, Pa. Architect, private plans. Owners, North Chester Realty Co., care of U. S. Shipping Board, Emergency Fleet Corp., 252 North Broad street, Philadelphia. Brick and hollow tile and stucco, 2 stories, 15 and 16x30 feet, ready roof, stone foundations, hot air heating, electric lighting, yellow pine floors. Owners taking bids. Price & Johnson, Chester, Pa., are figuring.

PENNSYLVANIA

Contracts Awarded

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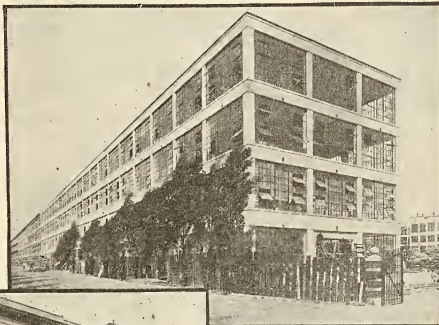
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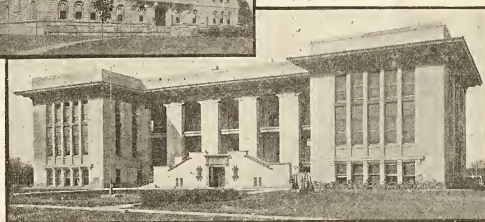
New York Chicago Philadelphia Boston
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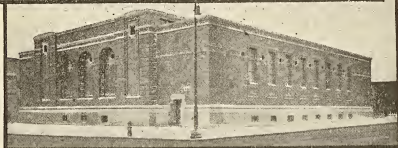
ABOVE: Pierce Arrow Motor Car Co., Buffalo, N. Y. Gen. Con.: Abertine Construction Co., Boston, Mass. Roofers: Jameson Roofing Co., Buffalo, N. Y.



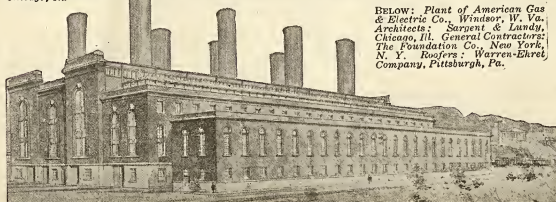
AT LEFT: Building at St. Mary's of the Woods College, Ind. Archt's: D.A. Bohlen & Son, Gen. Con'ts: The Bedford Stone & Construction Co. Roofers: Terre Haute Roofing Co., Terre Haute, Ind.

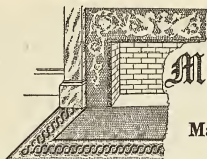


ABOVE: Lamar Street School, San Antonio, Texas. Archt's: Adams & Adams, San Antonio, Texas. Gen. Con'ts: Wright & Sanders, San Antonio, Texas. Roofers: Turner Roofing & Supply Co., San Antonio, Texas.



BELOW: Plant of American Gas & Electric Co., Windsor, W. Va. Architects: Sargent & Lundy, Chicago, Ill. General Contractors: The Foundation Co., New York, N. Y. Roofers: Warren-Ehret Company, Pittsburgh, Pa.





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NEW JERSEY

Construction News

Smithery, Blacksmith Shop, Coppersmith Shop and Electric Shop, Spec. 3501, Cape May, N. J., \$9000. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Frame, 1 story, 62½x30 feet, ready roof, yellow pine and cinder floor, concrete foundations, steam heating, electric lighting, roof ventilators. Owners taking bids due November 11th. Thos. C. Trafford, 1613 Sansom street, Lam Building Co., 1001 Wood street, and Cramp & Co., Denckla Building, all of Philadelphia, are figuring.

Manufacturing Building, Newark, N. J. Architects, Ballinger & Perrot, Seventeenth and Arch streets, Philadelphia. Owners, Essex Foundry Co., Newark, N. J. Brick, slow burning construction, 1 story and basement, slag roof, cement and reinforced concrete floors, rolled steel sash, office partitions. Architect, is figuring.

chitects taking bids due November 7th from the following additional bidders: Jackson Const. Co., 113 Vessey street, P. Polloch, 21 Mt. Prospect avenue, and Edw. N. Waldron, 665 Broad street, all of Newark, N. J.

Coal and Oil Pier, Spec. 3560, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Timber construction, 488x24 feet, sheet iron coal shutters, plank floors, railroad tracks. Owners taking bids due November 11th at 11 A. M. Cramp & Co., Denckla Building, Philadelphia, are figuring.

Garage, Fourteenth and Morgan streets, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corporation, Camden, N. J. Brick, 1 story, 62x220 feet, slag roof, cement floors, steam heating, electric lighting. Contract awarded to Doyle & Co., 1519 Sansom street, Philadelphia.

Miscellaneous Construction News

Light Machine and Electrical Shop, Spec. 3551, Navy Yard, New York City, \$800,000. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel, reinforced concrete, air lock brick, 6 stories, 395x94 feet, composition roof, concrete foundations, steam heating, electric lighting, glazed steel sash, steel rolling and swinging doors, metal doors and tin covered doors, iron stairs, reinforced concrete and wood floors, hollow tile, metal lath, 3 freight and 1 passenger elevator. Owners taking bids, due November 11th at 11 A. M. Warren-Moore Co., Colonial Trust Building, Philadelphia, is figuring.

Buildings (9), Conveyor Trestles (2), Spec. 3542, Naval Mine Depot, Yorktown, Va. Architect, private plans. Owners, U. S. Govern-

ment, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Steel and wood, hollow tile, concrete, asbestos protected metal siding, 1 story, various sizes, built up roof, concrete, wood and composition floors, hollow tile, metal lath, skylights, steel doors, iron stairs, concrete foundations, hot air and steam heating, electric lighting. Lowest bidder, Boyle Robertson Const. Co., Evans Building, Washington, D. C., \$280,568, 110 days.

Shop, Hagerstown, Md. Architect, private plans. Owners, Western Maryland Railroad Co., Baltimore, Md. Brick, 1 story, 100x130 feet, slag roof, cement floors, steam heating, electric lighting rolled steel sash. Contract awarded to Austin Co., Bulleing Building, Philadelphia.

Factory, Southeast Corner Jenks and Bath streets, Philadelphia, Pa., \$5000. Pennsylvania Forge Co. (O), Bridesburg, Pa. Wm. G. Donley (O), 742 Drexel Building. Brick and concrete, 1 story, 48x31 feet.

Convent (add.), 2028 West Girard avenue, \$4200. Nuns of St. Clare (O), 1904 Girard avenue. James McCann (O), 1704 Poplar st. Brick, 1 story, 15x39 feet.

Dwellings (15), Fernhill and Abbottsford road, \$56,200. J. H. McClatchey (O and C), Land Title Building. Brick, 2 stories, 16x32 feet, slag roof, hot water heating.

Store House and Shop (add), South side of Cambria street East of Bailey street, \$300. R. H. Pepper (A), 1808 North Seventh street. Somerset Repair Co. (O), on premises. J. F. Carberry (O), 6227 Limekiln Pike. Brick, 1 story, 21x9 feet 7 inches, concrete roof.

Storage (alt.), 1326 Oliver street, \$500. C. E. Monday O and C), on premises.

Tank Support, Church Lane and German-own avenue, \$2000. Blaisdell-Pencil Co. (O), on premises. P. H. Sax (O), Franklin Bank Building.

Dwelling, Fernhill and Abbottsford Road, \$4200. J. H. McClatchey (O and C), Land Title Building. Brick, 2 stories, 16x32 feet, slag roof, hot water heating.

Flush Bulk, 706 South Eighteenth street, \$400. P. G. Duncannon & Co. (O), on premises. S. H. Bythewood (O), 1709 Christian street.

Install Boiler, Southeast Corner Delaware and Weecacoe avenues, \$1000. American Agric. Chem. Co. (O and C), 897 Drexel Building.

Dwelling (alt.), 602 West Huntingdon st., \$500. H. Minderjahn (O), 602 West Huntingdon street. F. S. Hoover and Sons (C), 1023 Cherry street. Brick front.

Storage Building, 212 South Darien street, \$500. Garret-Buchanan Co. (O), 18 South Sixth street. F. S. Hoover and Sons (C), 1023 Cherry street. Brick, change front, two new doors.

Dwellings (2), Front Porch and Repairs, 5015 and 5017 West street, \$600. J. J. McCloskey (O), 2130 Margaret street. Owner contractor.

Dwellings (2), and Store changed to Dwellings, 316-318 West Norris street, \$500. Sam Keyser (O and C), 1312 North Sixth street. Factory, 238 South Second street, \$325. F. C. Buff (O), on premises. S. Jaston (C), 226 South Second street. Hot air.

Factory Alteration, 2614-16 North Bodine street. Deheiler & Co. (O), Southeast Corner Third and Huntingdon streets. M. Dolinsky (C), 1329 Pacific street.

Store and Dwelling Alterations, Southwest Corner Broad and Tasket streets, \$5200. H. T. Reynolds (O), 1343 South Tenth street. Stewart Bros. (C), 2524 North Orkney street.

Engine House, East side of Forty-ninth st., South of Grays avenue, \$80,000. Pennsylvania Railroad Co. (O and C), Broad Street Station. Reinforced concrete, slag roof, outer

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circle 260 feet, inner circle 120 feet, depth 120 feet.

Garage alt. and add., Southwest Corner Eleventh and Fitzwater streets, \$1700. Mike Delcollo (O), Northwest Corner Delhi and Bainbridge streets. F. Scroglin (C), 703 S. Tenth street. Brick, 1 story, 25x15 feet.

Garage, Repair Fire Damage, 2137-59-41 West Jefferson street, \$1965. S. Levin (O), 2213 West Jefferson street. Michael Kwschner (C), 421 Snyder avenue.

Factory, South side of Carpenter, west of Twenty-third street, \$800. Phila. Roll Machine Co. (O and C), Twenty-fifth and Washington avenue. Contract awarded to owner. Rebuild brick wall.

Loading Platform, Southeast corner Snyder avenue and Swanson street, \$500. Miller Waste Co. (O and C), on premises. Concrete and wood, 8x4 feet.

Store (alt. and add.), Flush Bulk, 5613 Germantown avenue, \$2500. F. W. Woolworth Co. (O and C), on premises. Brick, 1 story, 16x64 feet.

Dye House (alt.), Northeast corner Stenton and Godfrey streets. J. and J. Dobson (O and C), 809 Chestnut street. Raise roof.

Garage (alt.), South side of Thirteenth st., North of Arch street, \$1000. S. B. Fleisher (O), 2220 Green street. A. I. S. Coop (C), Hog Island.

Warehouse, 1610 Washington avenue, \$4200. J. G. Lorenz (O and C), 1610 Washington avenue. Brick, 1 story, 70x166 feet.

Water Safety Plant, Southwest corner Fifty-second and Grays avenue, \$4000. Tioza Steel and Iron Co. (O), on premises. Metz Structural Steel Co. (C), Bridgeport, Pa. Iron on iron, 1 story, 26x35 feet.

Garage, East side of Milner, North of Bleigh street, \$3000. Tacony Ordnance Co. (O and C), Milner and Bleigh streets. Frame, 1 story, 75x18 feet, 20x7 feet.

Warehouse (alt.), 22 North Fifth street, \$2240. Colleries Supply Co. (O), Northwest corner Commerce street. Doyle & Co. (C), 1519 Sansom street.

Coal Bunker, East side Canal, North of Fountain street, \$4000. A. T. Baker & Co. (O), on premises. Barclay White & Co. (C), 1713 Sansom street. Concrete and frame, concrete floor.

Factory, 1 story addition, Northwest corner Fifty-seventh and Grays avenue, \$2500. Unit Const. Co. (O), Fifty-seventh and Grays avenue. J. N. Gill (C), 1201 Otis Building. Brick, 1 story, 40x60 feet, slag roof.

Factory (add.), 214 South Twenty-fourth street, \$2640. C. C. Hives (C), 208 South Twenty-fourth street. C. F. Roeger (C), 51 North Hutchinson street. Brick, 1 story, 26x58 feet, slag roof.

Storage (alt.), North side of Boston avenue West of Kensington avenue, \$500. Pearson & Sons (O), Boston and Jasper streets. Wm. Steel & Sons (C), 1600 Arch street.

Store and Dwelling, Flush Bulk and alts., 7234 Woodland avenue, \$1300. Israel Malnek (O), on premises. L. Schnitzer (C), 741 Morris avenue.

Storage and Work Shop, Southeast corner Thirtieth and Spring Garden streets, \$600. Peoples Bros. (O), Twenty-fifth and Callow-

hill streets. J. F. Wolf (C), 148 North Vodes street.

Coal Vault, South side of Woodland avenue, West of Forty-third street, \$600. W. S. P. Shields (O), Witherspoon Building. L. Mariani & Co. (C), Ardmore, Pa. Stone, 9x13 feet.

Dwelling (add.), 615 Wharton street, \$300. S. Lit (O and C), on premises.

Dwelling, alteration to Tenement House, 1509 Poplar street, \$1000. Geo. A. Dill (O), 600 South Broad street. Chas. Eckels (C), 1511 Poplar street.

TOWN PLANNING AND HOUSING.

(Continued from Page 612.)

long experience that it is futile to destroy slums unless you find some means to rehouse those who now live in them.

It may be claimed that the pig creates the pig sty and those who live in slums do not want better conditions, but in practice it is found that improved environment converts the men and women of the slum into decent and careful citizens.

When we allow a slum people to be created in our midst, we cannot expect to reform them suddenly merely by altering their conditions. Nature demands compensation for past neglect and when once people become habituated to slums, you have to allow time for them to improve, even if you place them in better environment. I realize that in these matters much is due to individual irresponsibility and ignorance. A Scotch minister once asked his man John if it would not be better for him to give up drinking liquor. "Do you not take a drappie yourself, minister?" asked John. "Yes, but circumstances differ."

"Very true, sir," says John, "but can you tell me how the streets of Jerusalem were kept so clean."

"No, John."

"Well, sir, it was just because every one kept his own door clean."

No doubt much of the trouble of street and backyard cleaning could be improved by individual care and more regulation is needed in these respects. But we must accept the fact that the chief responsibility for improving the slums rests with the governing authorities and the business men of the city. Everybody in a city suffers from the presence of slums; most of all those who scheme would make the creation of slums as difficult in the future as their

creation is easy under present conditions.

The question of the cost of land and its relation to the cost of development have an important bearing on this question, and requires to be carefully investigated. Our present methods in regard to both are wasteful and extravagant. What we first want is to get proper data on which to base our legislation and proposals for reform; and after we have settled the right principles we should next proceed courageously to put it into effect.

Effective restrictions can be applied, as in Britain to secure:

1. Convenience in the lay-out of land for all purposes, including industrial development.

2. Economic planning and construction.

3. Amenity, including provision for air space and light.

4. Proper sanitary and public health regulations.

5. Architectural features.

Good real estate operators apply these restrictions themselves. Legislation is wanted to secure that the bad and indifferent owner of real estate will be brought into line with those who develop on proper lines.

About 200 municipalities in England have applied to the central department in England to prepare town planning schemes covering these matters, and plans are being prepared for hundreds of square miles which will prevent slum conditions in future and secure proper widths for all roads at comparatively little cost to the public. The cost is spread over a generation so as to relieve the present rate-payers of a burden which is for the benefit of posterity. What they do is to plan for posterity, but to leave those who enjoy the benefits to pay for them. A scheme for 5900 acres in England which controls the development of that area for the next fifty years has only cost the municipality \$5000 to prepare. Its ultimate cost will be about \$150,000 at the end of the fifty years, but by that time it will have secured advantages worth ten times that amount without loss to the owners of land.

The authorities of a city want to proceed by three stages. Their first duty is to prepare a topographical and social

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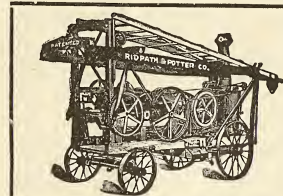
survey showing the existing physical features of the land forming the site of the city and its environs, the conditions of traffic, the distribution of the population, and the industrial and residential areas.

The next step would be to suggest the lines on which legislation should be passed to enable provisions to be drawn up to make town planning effective.

These two steps are essential and should be completed before the question of preparing a plan is considered. When they have been completed and legislation is obtained the preparation of the plan should be begun. The design itself should be the illustration of the provisions embodied in the scheme, and not the scheme itself. Each of the separate municipalities should plan their own areas but co-operate with the others. In order to make a scheme practicable you have to prepare an estimate of cost before you put it forward for approval. Most paper schemes are prepared without regard to cost because they are prepared in advance of power being obtained to carry them out. This is the essential difference between "town planning" in Britain and "city planning" in the States. In this matter at least the British are the more practical since they recognize that town planning has to be justified on financial as well as on aesthetic considerations.

TOWN PLANNING AND DEMOCRACY

In the United States you are a democratic people—you want to do not only what is practical and what is right but what has the consent of all the people. Some think it is undesirable to place too much stress on what they may call the god of efficiency and I am with them in condemning the kind of efficiency that is secured under a highly organized bureaucracy at the expense of initiative and grit in the individual. That is not the kind of efficiency you desire to emulate in a democratic nation. But do not confuse it with the kind that is natural outcome of good environment. It is because you have a people who must have liberty and independence, and because you reject machine-made efficiency, that you need all the more to have conditions in which each man and woman can secure equality of opportunity in becoming good and useful citizens. Your aim should surely



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be to secure the efficiency that comes from giving the human being room for natural expansion and not the kind that is artificially engendered by restraint.

But precisely because you are a democracy you require to exercise a certain amount of regulation and guidance in your municipal affairs, in the housing of your people, and in the planning of your cities. It is for the leading business men of your cities, and for those who direct your state and civic affairs,

to give an intelligent and unmistakable lead on this question.

May you not only be steadfast in your belief in self-government and in your regard for liberty, but may you transmit to future generations a heritage of good work done in the application of sound and sane principles of civic government in the exercise of foresight in the planning of your cities, and in the promulgation of high ideals of citizenship.—THOMAS ADAMS, in *Reality!*

VALUE OF TEMPORARY FACTORIES

(Extracts from an address by Lanson Purdy before Brooklyn Chamber of Commerce.)

We have all read a great deal about the alleged desirability of having war work done in the City of New York; and, I think, some of the Brooklyn newspapers have said something about the desirability of having it done in the Borough of Brooklyn. No community in the United States should be backward in welcoming any war industry when it is to the advantage of the United States Government.

But it is by no means desirable for a large community to have added to it suddenly a large number of workers, in an industry which must be temporary. I can see no gain to the Borough of Brooklyn by having established here a temporary industry that would bring a large number of workers here for the time being. Brooklyn has not the future of a heavy manufacturing community. The opportunities here are far too valuable for more intensive use of the facilities that Brooklyn affords to make it worth while to retain here any industry that requires a great deal of land, as do all heavy manufacturing industries.

You don't want these temporary industries established here. If they are established here

with reasonable access of Manhattan and the Bronx, housing facilities are probably sufficient for the time being for the workers that are likely to come. When you add 10,000 people to Brooklyn, Manhattan and the Bronx, it is not noticed. But it is when you bring 10,000 people to a Hog Island shipyard that housing facilities must be provided. If a shipping plant is established on the north shore of Staten Island, it will be necessary to provide adequate housing facilities on Staten Island. They are talking and even arranging for the transportation of workers from the Newark shipyards to Manhattan and Brooklyn and Queens, by an intensive use of the Hudson Tubes and the Pennsylvania Railroad. That will obviate the necessity of building houses for workers in the neighborhood of the Newark yards.

Beginning of the Housing Famine.

Before the war, as you very well know, there was a stoppage of building throughout the United States because of the rapidly increasing cost of building material and the increasing wage cost, and we were short of housing facilities in a great many places.

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With the establishment of great plants for war industries it became necessary to house the workers. Before the war there was another condition that had been in existence for a good many years, to which hardly sufficient attention had been paid, that of the very rapid labor turnover in great industries. In some of them it was so high that to maintain 1,000 men it was necessary to employ 4,000 during the year. Various estimates have been made as to the loss caused by the labor turnover, and all agree that the loss is very heavy. In one industry in which I am somewhat familiar an estimate was made as to the loss caused by the labor turnover. In this industry goods were manufactured which were easily damaged and spoiled. It was found that the spoilage of goods through carelessness and inexperience of the workers amounted in one year to a sum that would have built houses for a very large percentage of the force.

Some people who studied the conditions that confront Great Britain reported how Great Britain had met the trouble. They did not meet it immediately. They had to suffer quite a bit before they took hold of the situation and grasped it firmly, but by and by they did. Great Britain has built a number of very satisfactory communities. How have they done it? They found that to build temporary houses, to build barracks to house single men and to build barracks to house single women, the workers did not stay. To build temporary buildings cost nearly as much as to build permanent ones, and if they built temporary ones in a few years' time they had nothing to show for their money. So they decided to build permanent houses. And not only to build houses, but to build those amenities that go with houses. Just a house does not constitute a home. We have got to have a place for our comfort, and places where we can meet our friends and neighbors.

The British built a complete community where they have to build houses for the workers in a munition plant. You can see pictures of them in the publication of the American Institute of Architects in the issues of January to October last. It was just as easy when they had the right kind of architect to build houses that were attractive and beautiful to the eye as it was to build houses that were not beautiful.

Necessity for Superior Planning.

We are beginning to learn right here for our own good that we do not want any more of this planning with a gridiron. Those places are planned with narrow streets for residential sections. A residential street should not be adapted for a thoroughfare. It should be so arranged that it has seclusion, and so that the children can play on the street without the risk of being killed. The roadway need not be over twenty-four feet. You can have a grass plot between the street and the sidewalk. It costs far less to maintain that than it does the street.

Labor Army Must Be Contented.

The United States began to take thought of this. Our problem is not only to house possible workers, but it is to get and keep a contented labor army, and nothing costs too much, and nothing is too much trouble to achieve that end—a contented labor army that will turn out the goods that we need for the war, so that the war may be prosecuted and ended as speedily as possible. Our labor army is the reserve army that will win the war.

Where possible, it should get a tract of land large enough so that it creates a homogeneous community; a tract with considerable residential streets leading into main thoroughfares and into a community centre where the stores and theatres may be. They must have the movies. The people must have the movies, and while you are about it you should have a good movie house and put it in the right place to produce good revenue. The cost is going to be heavy for building at this time. The cost of these buildings will be thirty per cent. more than in normal times. That is an excess cost due to the war and will have to be charged off as a war expense as part of the cost of producing the goods in the factory. The government should not sell a single building in community.

Must Develop Community Interest.

Where you develop a tract of land, build single-family houses of modest size and with a modest amount of ground about them, and sell them off, you have little pieces of land with a fence around, for a back yard. Some people keep their back yards beautiful and some do not. It is far better to have all the back yards in common. Then you have a tract of land that is suitable for gardening. Tenants have their allotments of plots where they grow their vegetables, instead of each person having a fence around the place. In another part they may have a tennis court, or a flower garden. You can do a great deal more with an acre of ground than you can with a plot of ground about 30x40 feet.

If the United States does that, it may develop a very contented community so far as the conditions of life are concerned outside the factory. If it does that, after the war the probability is that even though the factories are engaged now on something that is temporary, that will be such a good community in which to plant a factory that the community will remain after the war and the manufacturers will go there because there is where they will have a good labor supply. Where there is a labor supply, other things being reasonably good, there is no trouble in getting a manufacturer. And, incidentally, we do not want to lose a town after the war.

The Ultimate Disposal.

Now we have our community so planned and controlled by the Government, and we assume that it has been well managed. What

after the war is over? I have a dream of my own. Probably others have had it. It would be a pity after the war to break up that well managed community. Why not let the United States sell it to the people that live there. I do not mean the individuals, I mean collectively. There are a number of plans by which this could be worked out. The one that seems the simplest would be to form a membership corporation without capital stock, and after the Government got back some of its money out of the property let that corporation take it over with a mortgage to the United States, which it shall amortize at a reasonable rate each year, after writing off the excess war cost. If it can get two per cent. over the interest at four and one-quarter per cent. or four and one-half per cent. it can pay off the entire sum. The tenant will pay all the rent that he normally ought to pay and when the United States is paid off, whatever is over and above the ordinary expenses of operation, after setting aside a sinking fund to rebuild the buildings as they are worn out, let them spend the balance as the community sees fit.

In such a community as I have described the people themselves would be making the money themselves, which would be spent on themselves, and they would only be paying for the privilege of living there, while heretofore they have been paying for living in a town without half so much advantage. And we should have such a town wherever the factories are for war munition workers.

FAR-SIGHTED BUILDERS.

The following notice, sent to all members of the Minneapolis Builders' Exchange, is worth the attention of the members of all exchanges throughout the country:

"Reports from all over the country indicate that Builders' Exchanges have been seriously set back through war necessities, but that was to be expected. Labor, materials and finances, which might be used in construction, are being deflected to other channels, and only essential building operations can go ahead. The Government has arranged a plan to eliminate, through a local board, some of the clouds which have obscured the industry and we hope the pressure will soon be lifted.

"Those Exchanges, like those business concerns which keep their organizations together as much as possible, will be in the best position to take part in the reconstruction work which will follow when the war is concluded."

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

TO INCREASE EFFICIENCY OF LABOR

Extent and Cause of Decrease in Efficiency Analyzed—Counteracting Measures Suggested.

By William B. King,

Counsel of the National Federation of Building Industries.

The testimony that labor has decreased in efficiency since the war began comes from many sources employing labor. It is almost universal in building and engineering construction. It is true on both public and private work. It extends to both skilled labor and common labor. Special trades or conditions may present exceptions or aggravations.

Causes of Decreased Efficiency.

The great increase in pay due to the war has probably been the principal cause of decreased efficiency. The workman has desired leisure in which to enjoy his increased pay. This desire, which might be wholly legitimate in time of peace, is illegitimate in war, when it is the duty of every person to work diligently.

Another cause for decreased efficiency is the excess of demand over supply. The employer needs more labor than he can get. The workman knows that, if discharged from one job, he can readily secure another. If the employer complains that the labor is inefficient, the workman leaves and goes to other work awaiting him. The employer cannot adopt any means to secure efficiency.

Extent of Inefficiency.

There are no statistics from which the extent of the inefficiency of labor as compared to pre-war conditions can be definitely ascertained. It must be a matter of estimate. The general testimony in building and engineering construction is that it takes two men to do the work which one man did before the war. In some localities contractors do not claim so large a decrease; in others they claim more. This is probably not far from a reasonable estimate.

Effect of Decreased Efficiency.

The amount of labor in the country is insufficient to carry on the war program and to conduct wealth-producing industry to its pre-war extent. The successful prosecution of the war being the first interest of the country, the War Industries Board has issued many orders restricting wealth-producing industries so as to make more labor available for war needs. In spite of this, there are grave deficiencies in labor engaged directly upon war work. Increased restrictions upon important industries will be necessary.

Effect of Increasing Efficiency.

The effect of increasing the efficiency to the pre-war standard is practically to double the amount of available labor of the country in the deficient branches. This would probably supply the need for all direct war work

and might leave some labor available for the production of wealth. The largest single source of productive labor in this country today is the increase of productivity of men now at work to their pre-war capacity. Considerably more than the pre-war labor productivity could be reached by working overtime, as is now general in most trades.

Means for Increasing Efficiency.

The workmen of this country, skilled and unskilled, are not lacking in fundamental patriotism. Their failure to work diligently is due to not appreciating their duty to their country. This must be exhibited to them in the strongest possible light from sources in which they will have confidence. Those sources are their own leaders and associates. It is unfortunately true that in the past in some over-crowded trades, a low degree of productivity has been held a sound principle to insure general employment. Labor leaders who may have advocated this in the past now recognize that patriotic duty in the country's necessity supersedes all other principles. The leaders in the ranks of labor can be relied upon to call upon their followers to do a full day's work. Many are already working for the United States in trying to win the war. Such call should be made by the national authorities of the unions. It should be supplemented by the public employment of local leaders in labor organizations to go from place to place and from union to union insisting upon the country's need for continuous and vigorous work. Many soldier members of labor organizations will be returned to this country with disabilities unfitting them for further active military service and can be utilized to preach to their former associates the doctrine that the same spirit of patriotism demands work here as animated their services at the front. This has been done by the United States Emergency Fleet Corporation with great success.

The Public Interest.

At the present time the labor of the country is not engaged in strictly private work. The War Industries Board has unified all the industry of the country and treats it in the public interest. The assumption by the Government of the power to curtail work in private establishments implies the corresponding obligation to aid in making such work effective. The effort must be national as the need is national. It is only by the adoption of vigorous means by the Government itself that this present grave deficiency in the effectiveness of the nation at war can be remedied.

ECONOMIC LIFE OF OFFICE BUILDINGS.

An examination of the older office buildings in any city will convince almost any one that the economic or commercial life of such buildings has not exceeded 40 years, stated Mr. Edward A. Renwick of Holabird & Roche, Architects, in a paper presented at the recent convention of the National Association of Building Owners.

Many of us, continued Mr. Renwick, feel that with the advent of the modern skeleton construction, which had its birth in Chicago in 1887, the climax has been reached in construction and that these buildings will at least last 100 years—physically they may last 200, but it is doubtful if they will have great economical value when 40 years old.

Every year we see buildings 25 to 35 years old being replated with new structures because their commercial life has ended, although perhaps they are still in good condition physically. Some of these when built were the best that could be produced with the engineering and architectural talent of the day, but new devices and methods of construction or changes in business requirements have destroyed them as competitors against these more modern buildings.

There are a number of modern fireproof buildings that have been taken down to make room for larger or different classes of buildings, because these removals made the land more productive by the change, even though the cost of the original structure was added to the value of the land. Of course had the owner been wise enough to have foreseen the new requirement and designed the building so it could have been readily converted to the new use, its commercial life would have been extended, but such provision would have added a considerable burden to the cost.

How can we best provide against this economic loss? The answer seems to be to set aside a sum for depreciation annually and invest it and its accrued interest in safe securities. The average owner feels that this depreciation will be offset by the increase in the land values, but to benefit by such increase, a sale must be made. Would it not be far wiser to set aside a fund and invest it in 4 per cent. securities and thus, when serious changes are required to prolong the life of the building, the funds will be at hand to do so, and thus revive the economical life and check the rapid depreciation with consequent lowering of the character of the tenants. If a sum equal to 1 per cent. of the cost of the building is so set aside annually and invested at 4 per cent. and the interest re-invested at 4 per cent., it will equal the cost of the building in 40 years.

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Reserve for Taxes - - -	950,000.00
Reserve for Sundries - - -	160,000.00
Surplus - - -	8,317,502.26
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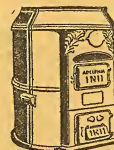
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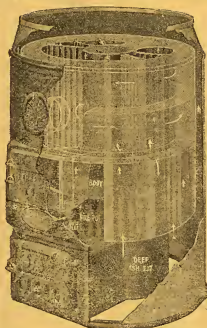
Builders' Guide

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Vol. XXXIII., No. 46
November 13, 1918

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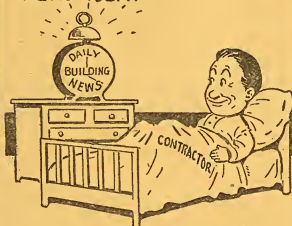


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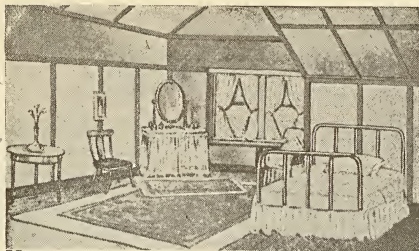
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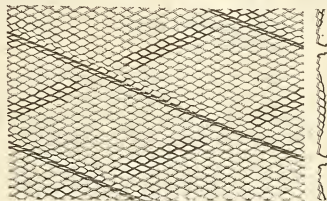
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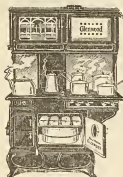
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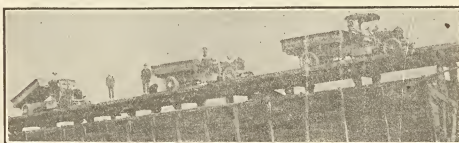
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Devoted to the Advancement of American Architecture, Structural
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VOLUME XXXIII
Number 46

PHILADELPHIA
November 13, 1918

BUILDERS' GUIDE

FORMERLY

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and Builders' Guide
PUBLISHED WEEKLY

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As The Editor Sees It



ALTHOUGH the peace treaty is yet to be signed, it is time to consider peace conditions and to begin preparation for the period following the war. The prevailing sentiment everywhere is optimism, but we must be careful not to let our elation over the course of events cloud our vision, nor confuse our saner thoughts.

We have every reason indeed to be optimistic about the future of this, our country—we are poor Americans who do not have absolute faith in the unprecedented success of America after the war. To uphold our belief in a period of prosperity to follow peace we quote from accounts of conditions following previous wars.

Theodore E. Burton, in his "Crises and Depressions," says:

"In 1815, at the close of the Napoleonic Wars in Europe and the war with Great Britain, commenced a new commercial and industrial era which was world-wide in its influence. The preceding quarter of a century had been marked by almost constant war, involving the larger part of Europe, and for a much longer time there had been frequent contests among the nations. The succeeding period, with slight interruptions, was one of peace and new and greater development commenced. For a few years both in Europe and America there was a time of waiting, necessary for recovery from the exhaustion of war. Steady improvement may be said to date from the year 1819."

Speaking of the period following the Civil War, Coman, in his "Industrial His-

tory of the United States," says:

"War demands, coupled with the protective tariff, induced an extraordinary activity in every department of business enterprise. Universal buoyancy and unbounded confidence in the future, rendered it easy to borrow money at home and abroad. Europe invested heavily in United States securities, railroad bonds and mining stocks and the resources of the country were exploited as never before. Farm acreage was doubled and the farmers began to export wheat and corn and cattle to Europe, where a series of crop failures assured them extraordinary prices. England furnished an unlimited market for American cotton. Production of steel increased one hundredfold in the decade following the Civil War. Improvements in methods of mining and smelting soon reduced the cost of producing iron and steel to the English average."

It is difficult to imagine the return of several millions of men to industry without a radical readjustment to new conditions, and yet such was the case at the end of the Civil War, according to Wm. Archibald Dunning in his book, "The American Nation."

"It is difficult to detect, however, any economic influence of the great and sudden change in the North during the middle of 1865. The abrupt transfer of nearly a million able-bodied men from destructive to productive occupations, with a simultaneous curtailment and extinction of many large industries, might have been expected to make itself con-

spicuously felt in business and finance, but hardly a ripple was manifest on the placid surface of economic life. The readjustment of forces proceeded so peacefully as to leave no sign."

The proportionate number of men who will return from the present war if it ends within a year will be no greater than the number who returned from the Civil War, so the labor problem will be no more difficult to solve than at that time.

Business men in general hold a cheerful and optimistic view of the present situation. Mr. Grellet Collins, of Dill & Collins, Philadelphia, prophesies an era of unprecedented demand for manufactured goods of every description, and this will be a great factor in steadying wage rates.

According to Mr. Chas. W. Asbury, of the Enterprise Manufacturing Co., "the start of slowing munitions production will probably be taken up by revival in the building industries and by the needs of foreign countries."

This optimism is, as we have said, justified and yet we must be prepared to meet the demands of the new conditions which will arise. In comparing the situation at the end of the Civil War with that of today we read in the "Corn Exchange:"

After the Civil War the home field was so vast that there was, for the time being, unlimited room for industrial development. After this war our field by contrast will be more largely a foreign one. New railroad construction, which was practically in its infancy in the sixties, has now almost reached its limit, at least

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for the time being. It is doubtful if new lines will again be built far ahead of demand. During the Civil War such lines were built by the aid of Government subsidies and the grant of vast tracts of land.

In still another way the situation is different. We are not entering a virgin field of labor-saving machinery. Indeed, our productive capacity to-day is considerably ahead of the normal home demand and the situation now compared with the sixties, therefore, lacks that stimulant.

In the important matter of the merchant marine, it is a serious question whether our fleet can be successfully operated permanently without the aid of subsidies. Our shipping laws need revision. Even during the period of lower tariffs in the forties when our merchant marine was prosperous, the value of subsidies was shown when they were removed and our tonnage dropped from 2,500,000 in 1860 to 1,500,000 in 1870.

It would seem unavoidable, if history is any criterion, that prices will fall after the war, and the difference in the productive situation between the two periods under discussion would seem to warrant the opinion that wages will certainly not advance and that the action of labor unionism hold out possibilities of considerable moment. The spirit of caution that is in the air to-day is the best insurance against business disaster. Whether we shall capitalize as we should the commercial advantages of our position after the war will be determined largely by the course of legislation. It is evident that there will be a feeling out period before a normal business equilibrium is established. We must not forget that our present high financial position which contracts so much more favorably than our position at the end of the Civil War was secured largely while we were a neutral country, at the expense of the other nations engaged in the war and built on their misfortunes. If this blinds us to the necessity of extraordinary measures for insuring our rightful place in the realignment of the commercial positions of the nations, it is quite possible we would witness greater industrial activity in Great Britain, France and Germany than in our own country.

This, then, is the warning which must not go unheeded, if we are to be prepared for peace conditions.

On our ability to cope with these conditions rests the fate of business in general and the building business in particular.

Real estate men have confidence in active building operations. They are sure dwelling houses are needed and think there has been an accumulation of capital which will be so used. They look for a considerable conversion of Liberty Bonds into home properties. They also look for

activity in office-building construction. It is probable that the realization of their hopes depends mainly upon the general state of employment and business, and that is the case in many lines.

What are the conditions which are definitely favorable to trade and industry? In the first place agriculture is prosperous and quite certainly will be for the year to come, and this means buying power in the largest single group of the population. The foreign demand for all raw materials should be large, which includes the metals, copper, lead, zinc and silver, and the districts in which these are produced should be busy. The demand for cotton and cotton goods should be such as to make the South prosperous, and to give employment to the mills in all sections. Ship-building presumably will continue throughout next year, and this will not only give employment in the yards but furnish an outlet for steel. The agricul-

tural implement business will also have a large export trade, and will use an important amount of steel. The automobile industry showed no signs of being affected by the rise of materials, and only asks to have the latter supplied. Machinery of many kinds will be wanted for replacement abroad. Lumber and builders' hardware and steel and railway equipment presumably will be wanted abroad for rebuilding, but the extent of this demand cannot be calculated. Speaking generally, foreign trade should be better than before the war, if means are found by which would-be customers can make payment. It may as well be recognized at the outset that this question of how payment can be made is a vital one.

The situation confronting us opens many avenues of opportunity, but in our optimismism we must not forget that a thorough study of conditions is imperative before we venture forward.

CITIZENS SHOULD OWN HOMES

By Orlando W. Norcross, Contractor

Figuring out the problem, I have found that a strip of land 10 miles wide extending from Worcester to Boston will house every man, woman and child in Massachusetts and will give every household a half-acre patch of land for family use. That strip would be relatively only a small part of the state. It goes to show that there is much waste land in Massachusetts and that we have not anywhere nearly reached the limit of our land development.

When the late James H. Mellen was alive I took great interest in proposing my homestead plan for working people and Mr. Mellen made an issue of it and later the idea became the foundation of the Massachusetts homestead law. The best way to build up the citizenry of the state is to give worthy citizens an opportunity to own homes for themselves. There is a degree of responsibility and of self-reliance that goes with home ownership that tends to make first-class citizens. Massachusetts ought to finance every young man of good character and lend him the money to buy land and own a home for himself and his family. Not in any sense am I advocating a plan to give the young man something for nothing. I do not favor the plan of making him a present of a lump sum of cash and telling him to go forth and build; I mean that the state should make it easy for the young man of sound character to own a home.

I have been engaged in business for many years and I esteem character as the greatest asset that any man can have. The state should enact a law so that a young

man who wanted to get married and live in a home of his own could borrow money from the state at 4½ per cent with which to buy his land and build a house thereon.

My plan includes having the state issue bonds paying interest at 3½ per cent. In my opinion any well-to-do folks would invest in them. There could be no better investment for large sums of money than bonds issued by the state, backed by the real estate in the state. There would be a difference of 1 per cent, and that 1 per cent would pay all the expenses of the department of land loans.

It is my purpose to enlarge on this subject before long. I would have the state take over a tract of land, cut it up into lots of the required size, grade it so that every drop of rain that fell from heaven would stay on it, and plant it with fruit and shade trees. Then give the desirable young man of honorable character a chance to buy it with state money and pay the interest on it and build there.—*Worcester (Mass.) Telegram.*

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Blacksmith Shop, Nicetown, Phila. Architect, Private plans. Owners, Midvale Steel & Ordnance Co., Wedener Bldg., Phila. Brick, concrete foundations, 142x90 ft. slag roof, rolled steel sash. Owners taking bids due as soon as possible. Barclay White & Co., 1713 Sansom st.; Wark & Co., 1737 Filbert st.; Warren-Moore Co., Colonial Trust Bldg.; Wm Steel Parkway; Irwin & Leighton, 126 N. 12th st.; F. W. Mark Cont. Co., Finance Bldg.; M. W. Lindsay, Harrison Bldg.; Geo. F. Pawling Co., 1432 S. Penn Sq., and Nardy Co., Bulletin Bldg., are complete list of bidders figuring.

Fire Station, No. 23, 7th st above Norris st., Phila. Architect, Jos. A. Roletter, City Hall, Phila. Owner, City of Phila., care of Dept of Public Safety, 215 City Hall. Brick work, painting, sheet metal work, tin work. Lowest bidder, Geo. Dobbins, 42nd and Chester ave., \$1,889.

Fire Station, No. 10, 808 Norris st., Phila. Architect, Jos. A. Roletter, City Hall, Phila. Owners, City of Phila., care of Dept. of Public Safety, 215 City Hall. Mill work, doors, tin and slag roofing, painting, glazing and brickwork. Lowest bidder, Hogg Const. Co., 1634 Sansom st. \$2,444.

Municipal Repair Shop, 11th and Reed sts., Phila. Architect, Jos. A. Roletter, City Hall, Phila. Owners, City of Phila., care of Dept of Public Safety, 216 City Hall. Cement work, electric elevator, dumbwaiter and miscellaneous repairs. Lowest bidder, Geo. Dobbins, 42nd and Chester ave. \$10,790.

Dwelling (fire repairs) and Shed, 2135 N. Marine st., \$800. Architect, private plans. Owner, J. Emil Doepele, 4612 Wayne ave. Shed, frame, 11x8 ft., residence, general repairs. Owner will build.

Shipbuilding Slips, Nos. 2 and 3 (Add.), Spec. 3469, Navy Yard, Phila. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept, Washington, D. C., or office of Commandant, Phila. Navy Yard. Reinforced concrete, 169x124 and 148x128 ft., slag roof, wood and concrete piles, hot water heating, electric lighting, rolled steel sash, cement floors, hollow tile, safety treads, tin clad doors. Owners taking bids due November 25th at 11 A. M. Wark & Co., 1737 Filbert st.; Geo. F. Pawling & Co., 1432 S. Penn Sq., and Cramp & Co., Denckla Bldg., are figuring.

Pennsylvania Construction News

Schools (4), Bethlehem, Pa. Architect, Verus T. Ritter, North American Bldg., Phila. Owners, Bethlehem School District, H. G. Lewis, Bethlehem, Pa. Brick and stone. Preliminary plans in progress. Too early for details.

Central and Y. M. C. A. Bldg., Harrison, Pa. Architect, private plans. Owners, Emer Fleet Corp., Merchant Shipbldg. Co., Harrison, Pr. Brick (fireproof), 2 stories, 60x470 ft., and 5 stories, 100x60 ft., slag and tile roof, hardwood and cement floors, hollow tile, metal lath, tile work, fire doors, roof ventilators, dampproofing (plumbing, heating and electric work reserved). Revised plans in progress. Will be ready for bids in two weeks.

War Workers' Bldgs. (Alts. and Add.), Fernwood and Chester, Pa., \$80,000. Architect, private plans. Owners, U. S. Housing Commission, 130 S. 15th st., Phila. Miscellaneous interior and exterior alterations, new partitions, new wood and cement floors, plastering. Contract awarded to John M. Yardley, 1716 Sansom st., Phila.

Piggery, Spring City, Chester Co., Pa. Architect, Philip H. Johnson, Land Title Bldg., Phila. Owner, State Institution for Feeble-minded of Eastern Penna. Concrete, brick and hollow tile, 1½ stories, asbestos shingle roof, concrete foundations, cement and wood block floors, hollow tile, roof ventilators, waterproofing, dampproofing, iron work. Contract awarded to Fred H. Kaiser, Pottstown, Pa.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Pavement, Platform, Pramp Piers and Boathouse. Spec. 3421, Navy Yard, Phila., \$99,000. Architect, private plans. Owners, U. S. Govt., care of Office of Public Works, Navy Yard. Concrete walls, scale pit with winch footing, scale 100,000 lbs. capacity, 12x20 ft. boathouse, frame, 1 story, 48x60 ft., pier 126½x12 ft., ready roofing, metal lath, waterproofing, electric lighting. Contract awarded to Geo. F. Pawling Co., 1432 S. Penn Sq.

Hospital (Alt. & Add.), Frankford ave. and Wakeling st., \$55,000. Architects, Stearns, Woodruff & Schneidt, Stepien Bldg., Phila. Brick and terra cotta, 1 story and basement, 46x27 ft., slag roof, cement and pine floors, tile work, metal lath, galvanized iron skylights, roof ventilators, waterproofing. Contract awarded to Wm. R. Dougherty, 1610 Sansom st., Phila.

Office Building, Frankford, Phila. Architect, Wm. C. Pritchett, 416 Walnut st., Phila. Owner, Barrett Mfg. Co., 36th and Gray's Ferry rd., Phila. Reinforced concrete and brick, 4 stories, 50x63 ft. Barrett roof, maple floor, hollow tile, marble and terrazzo work, rolled steel sash and safety treads,

waterproofing. Contract awarded to Turner Concrete Steel Co., 1713 Sansom st.

Garage, 1608-10 N. 13th st., Phila., \$2,300. Architect, private plans. Owner, Daniel P. Murphy, 1608 N. 13th st., Phila. Brick, 1 story, slag roof, cement floor, electric lighting. Contract awarded to John P. Fallon, 449 S. 30th st., Phila.

Residence (Alt and Add.), 634 Cliveden ave., Gtn. Architect, Frank E. Hahn, 1112 Chestnut st., Phila. Owner, E. Sklaroff, 712 S. 2nd st., Phila. Interior alterations and porch inclosures. Contract awarded to H. Seidman, 1312 N. 6th st., Phila.

Garage (Add.), 32nd and Powelton ave., \$2,500. Architect, private plans. Owners, Penna. RR. Co., Broad St. Station, Phila. Brick, 1 story, 23½x22 ft., slag roof, cement floor. Contract awarded to Brann & Steward, Commercial Trust Bldg.

Stable (Alts.) to Garage, 1000 N. Front st., \$1,000. Architect, private plans. Owners, H. F. Gates & Son, on premises. General interior alterations. Contract awarded to Samuel S. & T. Henry B. Sanders, 519 Richmond st., Phila.

New Jersey Construction News

Storage Building, Broadway and Fairview sts., Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Frame, 1 story, 78x90 ft., prepared roof. Owners will build.

Storage Building, Broadway and Fairview st., Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Corp., Camden, N. J. Frame, 1 story, 64x160 ft., Rubberoid roof. Contract awarded to Frazer Brace Co., New York City.

Passenger Station, Newark, N. J. Architect, private plans. Owners, Penna. R. R. Co., Broad St. Station, Phila. Interior changes to offices, brick and concrete work, cement work, millwork, painting, plastering, glazing, electrical work. Contract awarded to A. L. Carhart, Heed Bldg., Phila.

Coal and Oil Pier, Spec. 3560, Cape May, N. J. Architect, private plans. Owners, U.

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ROOFING and STRUCTURAL SLATE

S. Govt., care of C W Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Timber construction, 488x24 ft. sheet iron coal shutters, plank floors, railroad tracks. Owners taking bids due November 25th at 11 A. M. Cramp & Co., Docks Building, are figuring.

Post Office (Alt.), Trenton, N. J. Architect, Jas. A. Wetmore, Treasury Dept., Washington, D. C. Owner, U. S. Govt., care

of Treasury Dept., Washington, D. C. New lookout gallery. Plans completed. Owners taking bids due November 25th at 3 P. M.

Theatre, Atlantic City, N. J. Architects, Hoffman Co., Finance Bldg., Phila. Owners, Globe Theatre, Atlantic City, N. J. Consists of general alterations. Plans about completed. Architects will be ready for bids in ten days.

C. Davis (O and C), 5905 Trinity st., Philadelphia, Pa.

Garage, 6438 Woodbine st., Philadelphia, Pa., \$2400. J. S. Gustine, Jr. (O), 6432 Woodbine ave. Milton W Young (C), 2012 Upland Way Stone, 1 story, 23 ft. 6 in. x 25 ft. 6 in.

Dwelling (Repair) 5710 Wissahickon ave., Philadelphia, Pa., \$500. H. C. Rump (O), on premises. E. A. Heffner (C), 6361 Jefferson st., Philadelphia, Pa.

Dwelling (Add.), 3155 Richmond st., Philadelphia, Pa., \$500. S. Gardek (O), on premises. John Urban (C), 3170 Richmond st., Philadelphia, Pa. Brick, 2 story, 10x4 ft.

Yardmaster's Office, south side Gray's Ferry rd. west Schuylkill River, Philadelphia, Pa., \$1000. Penna. R. R. Co. (O), Broad St. Station, Philadelphia Wm. Steel & Son Co. (C), 1600 Arch st. Frame, 1 story, 24x36 ft.

Shop, 5516 Yocum st., Philadelphia, Pa., \$595. W. Simpson (O), 46th and Baltimore ave., Philadelphia, Pa. M. A. Richey (C), 5008 Pentridge st. Brick, 1 story, 16x25 ft.

Theatre Storm Enclosure, southeast corner, 52nd and Ludlow sts., Philadelphia, Pa., \$357. F. G. Nixon Nirdlinger (O), 16th and Walnut sts Fred G. Jay (C), 6016 Summer st.

Workshop, rear of 723 N. 26th st., Philadelphia, Pa., \$1200. J. J. Harding (O), on premises. Brick, 2 stories, 17x64 ft., slag roof. Owner will build.

Bath House (Int. Alt.), 436-40-42 Ludlow st., Philadelphia, Pa., \$3000. J. Bershad (O and C), Chester, Pa. Brick, 2 stories, 20x17 ft., new stairway.

Garage 738 S. 5th st., Philadelphia, Pa., \$400. Jas. Dyke (O), on premises. C. Adams (C), 5917 Chester ave., Philadelphia, Pa. Brick and concrete, 1 story, 8x15 ft.

Brick Elevator Shaft (Alt.), northwest corner Thompson and Mascher sts., Philadelphia, Pa. S. J. Rea (C), 1608 Fairmount ave. T. A. Harris Co., 147 Thompson st.

Garage (Alt.), southwest corner 40th and Westminster ave., Philadelphia, Pa., \$750. F. C. Burstein (O), Filbert st., Philadelphia, Pa. J. S. Pennock (C). Larger boiler and radiator, steam heating.

Miscellaneous Construction News

Emergency Hospital Bldgs. (18), Spec. 3620, \$1,500,000, Norfolk (Portsmouth) Va. Clean Group of (3070). Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Frame, hollow tile, brick, stucco, 1 and 1 stories, various sizes, ready, slag and slate roofs, concrete foundations, steam heating, electric lighting, rolled steel sash, iron stairs, cement and wood floors, hollow tile, metal lath, roof ventilators, waterproofing. Owners taking bids due November 14th at 11 A. M. Warren-Moore Co., Colonial Trust Bldg., and Wm. R. Dougherty, 1610 Sansom st., Phila., are figuring.

Ordnance Buildings (7), Spec. 3435, Washington, D. C., \$433,000. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and

Docks, Navy Dept., Washington, D. C. Brick, steel, concrete and terra cotta, 1 story, slag roof, cement floors, steam heating, electric lighting, hollow tile and stucco, rolled steel sash, fired oors. Contract awarded to Geo. F. Pawling Co., 1432 S. Penn Sq., Phila.

Radial Brick Towers (20), Monroe, N. C., \$3,000,000. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks Navy Dept., Washington, D. C. Brick and concrete and steel. Owners taking bids due November 25th. Warren-Moore Co., Colonial Trust Bldg., Phila., is figuring.

Hangar, Pavement and Marine Railroads, Hampton Roads, Va. Spec. 3623. \$165,000. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks Navy Dept., Washington, D. C. Owners ready for bids due November 18th.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Ware house (Alt.), southwest corner Broad and Somerset sts., Philadelphia, Pa., \$2300. N. R. Nicholson (O), Broad and Chestnut sts. Ballinger & Perot (C), north-

west corner 17th and Arch sts., Philadelphia, Pa.

Change Dwelling to an Apartment, 3900 Baring St., Philadelphia, Pa., \$300. Harry

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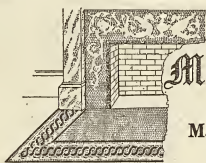
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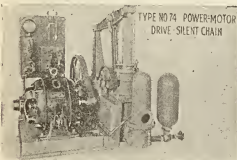
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Radial Brick Chimney, north side Erie
ave, east of Sepvira st., Philadelphia, Pa.,
\$4150. Savage Const. Co. (O), Erie and
Sepvira sts. H. R. Heinecke, Inc. (C), 21
S. 12th st, Philadelphia, Pa. Brick, 110 ft.
high.

Store and Dwelling (Add. and Alt.),
northeast corner 7th and Ritner sts., Phila-
delphia, Pa., \$2100. M Rudberg (O), 708
S. 4th St. Schechman Bros. (C), 1734 N.
7th st. Brick, 2 story 16x10 ft

Bridge (Alt.), 1706 Ludlow st. to 1710
Market st., Philadelphia, Pa. \$750. U. S.
Government (O), 1710 Market st F. L.
Hoover & Sons (C), 1023 Cherry St., Phila-
delphia.

Dwelling (Alt.), 615 N. 7th st., Phila-
delphia, Pa., \$300. Dr. Helmstein (O), on
premises Schechtman Bros. (C), 1734 N.
7th st. Replace with brick walls.

Oil Pit, southeast corner of Swanson and
Snyder ave., Philadelphia, Pa., \$450. Gen.
Mfg. Co. (O), on premises. Henry Friend
(C), Norristown, Pa. Concrete, 1 story, 26
x6 ft.

Office (Alt.), 26 W. Chretien ave., Phila-
delphia, Pa., \$1150. Bell Tel. Co. (O),
17th and Arch sts. F. L. Hoover & Son
(C), 1023 Cherry st.

Dwelling (Fire Repair and Frame Shed),
2135 N. Marvline st., Philadelphia, Pa.,
\$800. J. E. Doepele (O and C), 4612 Wayne
ave., Philadelphia, Pa.

Garage (Add.), east side of 32nd st.
south of Powelton ave., Philadelphia, Pa.,
\$2500. Penna. R. R. Co. (O), Broad St.
Station. Brann & Stewart (C), 310 Com-
mercial Trust Bldg. Brick, 1 story, 24x21
ft. 8 ins.

Store and Dwelling (new brick front),
2207 S. 12th st., Philadelphia, Pa., \$350.
Maria Capocianash (O), on premises. Al-
fonso Pili (C), 1209 S. 13th st.

Engine and Boiler House, northeast cor-

ned Roberts ave. and Stokley st., Philadel-
phia, Pa., \$20,000. Wm. Steele & Sons (C),
1600 Arch st. American Insulating Co. (O),
on premises. B. Rick, 1 story, 27x21 ft. 6 in.,
2 story, 46 ft. 3 in. x 48 ft. 1 in.

Garage, northeast corner 23rd and West-
moreland sts., Philadelphia, Pa., \$400.
Hero Mfg. Co. (O), Gaul and Adams sts.
M. Meister Co. (C), 2031 N. 5th st. Iron, 1
story, 17x24 ft.

Garage, south side of Cherry west of
Broad st., Philadelphia, Pa., \$490, Y. M. C.
Assoc. (O), 1421 Arch st. M. Morster &
Co., 3931 N. 5th st. Iron, 1 story, 20x32 ft.

Factory, 206 S. 24th st., Philadelphia,
Pa., \$350. C. E. Heves Co' (O), on prem-
ises. Uniflow Boiler Co. (C), 8028 Harri-
son Bldg.

Hospital, Frankford ave. and Wakeling
st., Philadelphia, Pa., \$20,000. Frankford
Hospital on premises. W. R. Dougherty
(C), 1608 Sansom st. Finish 3rd floor,
ceiling.

Dining Kitchen and Laundry, Frankford
ave. and Wakeling St., Philadelphia, Pa.
\$20,000. Frankford Hospital on premises.
W. R. Dougherty (C), 1608 Sansom st.
Brick, 1 story and basement, 44 ft. 6 in x 49
ft.

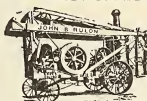
Storage Shed, southeast corner Delaware
and Weccacoe aves., Philadelphia, Pa.,
\$900. Armenian Agriculture Co. (O and
C), Drexel Bldg. Frame, 1 story, 20x60 ft.

Garage, 1608-10 N. 13th St., Philadel-
phia, Pa., \$2300. D. P. Murphy (O), on
premises J. P. Fallon (C), 449 S. 60th St.

Stable to Garage, 1000 N. Front st., Phila-
delphia, Pa., \$1000. M. F. Gates & Son
(O), on premises. Sanders (C), 519 Rich-
mond st., Philadelphia, Pa.

Hot Water Heat, 4925F alrmount ave.,
Philadelphia, Pa., \$500. Jas. Pomfret (O
and C), on premises.

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frame trimmign, fire will spread through
vertical openings with terrible rapidity. This
was well illustrated in the Lenox Hotel fire
in Boston—the hotel building of fire resistive
construction—where the fire spread only be-
cause of a small amount of wood. The first
requisite for making hotels and apartment
houses safe against the fire hazard for occu-
pants would be to close all vertical openings
or make arrangements so that openings would
be closed in case of fire. There is not only
the danger of the fire spreading upward, but
what causes more deaths than actual upward
spread of the fire, the danger of upward
spread of smoke, which closed openings would
prevent.

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and forget the rest is wisdom. Let Braggo
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ushers are always looking for trouble—and
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RECONSTRUCTION—WHAT DOES IT MEAN?

FOR some time, in this country, we have become familiar with the word "Reconstruction." Gradually, as the wreck and ruin of German's invasion and its dauntless resistance were surveyed; as the world was let to see a picture of the physical destruction wrought by the enginery of modern warfare; as the armies of the Allies slowly recovered sections of the torn and bleeding countryside of northern France; as the heaped-up ruins of town and villages were wrested from the invaders, there came the immediate problem of repatriating the peasantry in order that the maimed and mangled fields might lend what measure of fertility they possessed to the sustenance of the nation. These pictures and these needs fell quickly upon the trembling sympathies of the United States. Nor were pity and sympathy left to waste their force or weakly to meditate where action was imperative. We became greatly interested in the problem and proposed many things, some of which were not at all wise. The American Red Cross at once created a branch of its extensive organization and set aside a considerable sum of money for dealing with this problem, temporary though might be the work that it should do. The real problem of reconstruction was still to come, as all could see.

Much of the work of temporary repatriation was lost in the recent German advances, and will now have to be done over again, but, in the meanwhile, the word "Reconstruction," through the dawning of many perceptions that had at first been missed, was acquiring a significance vastly larger than that which it possessed when the necessities of the physical problem first thrust themselves upon us and upon those with whom we stand in defense of the principles we profess.

The first great thrill of awakening to the larger meaning of that word which we at first rolled so familiarly and easily on our tongue—the first clear and striking perception of a problem which we had thought to solve by pouring enough money into the right channels, by designing new towns and villages wholesale,

building them wholesale, and, in general, by giving another turn of the screw to our mechanistic organization or by adding a few more pounds to the pressure on the industrial engine which had already reached the bursting point, even though we could not detect it—the first inkling of these things came when the British Labor Party gave to the world its proposed measures looking toward reconstruction.

Our consciousness had already been quickened. The problem was seen to be something far more than the rehabilitation of devastated lands. England, which had not even been invaded, was far advanced in considerations of what she had come to sense as the onrushing problems of her post-war readjustments. There had even been vague stirrings in our own land, chiefly evidenced by a casual speculation or a decided intimation, by some, that we too would have our problems and that things would not be as they had been. But it is, perhaps, not far from true to say that, up to that time, no thrill had so permeated the hearts of the thinking men and women of the world of to-day as that which swept over their intelligence when they read the Program of Reconstruction which had been born at the hands of the workers of England. Here was unfolded the vision which all had been trying to piece together in their minds. Here were defined in simple terms, eloquent with the throb of purpose more human than that which has ever formed the base of any concept of Government, the precepts upon which there might be builded a society which should be the living expression of that theory of democracy which we now defend. Reconstruction became a word which was thenceforth to scatter its seed broadcast and to cause a germination of immeasurable intensity.

By and by we shall see, as we so often do, that it was not really the word for which we were looking; that it was quite unconsciously forced upon us by circumstances, and that we shall be often handicapped because of the fact that it does not wholly express the complete problem. But to-day it has acquired a meaning

which is steadily being expanded, steadily being quickened with the warmth of a larger human concept, and we must let it bear us as far on our journey as its strength will permit.

The primal physical problem which gave it birth has become slowly impregnated with the germs of animate Life. The solution which we so bravely thought to depend upon architects and engineers, and upon the skill and swiftness with which they should plan; upon the speed and sureness with which they should be followed by those who hew to their line and build to their scale; upon the mountainous quantity of materials which only need to be assembled, ranged, and piled in colossal groups—all of this was seen to be only the organization of things, after all, and to be wanting an element the lack of which would make our effort as barren of the democratic result we seek, as all our effort of the past has been so helpless and ineffective to stay the ages of war, in unending succession. What is that element?

What, one may ask in reply, is the basic unit around which all our plans for reconstruction must revolve? It ought to be evident to the dullest mind that unless we can discover that basic unit and its needs, we can neither design, nor build, nor reconstruct anything which will be right. And, therefore, as we stand before the fragments of a world which we believe must be reconstructed, must we not search, as our first duty, for that unit, the finding of which is so vital to all that we propose to do? Alas! It seems an infinite task. As we first approach it, we seem to be caught in an inextricable tangle of complexities. The world seems overflowing with an unending stream of humans, each having his own needs. They defy all classification and seem to be quite unrelated one to another. The truth is, of course, that we are in reality searching for a type or unit of human life, although we do not for a long time suspect it, and it is quite natural that we should be utterly unsuccessful. Of human life there is no type, nor is there any unit which can be resolved into a basic quantity upon which accurate calculations may be made. As well try to determine the type of the waves of the sea, we say, and in the very saying of those words we gain a gleam of light. If the waves have no type, they

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at least have one thing in common—motion. Life has this quality, too, as we know it in humans, and although at first we may say that it has a different motion—since it has the power of locomotion—we shall finally come to see that there is a great similarity between the ceaseless rising and falling of the sea and the motion of life. The water, then, has need for motion. We know from chemistry that without this motion it would become stagnant—that the winds which play upon its surface are but the purifying forces which keep it clean.

Out of these simple phenomena how can we resolve an equation which will fit life? May it not be that, instead of seeking the type or the basic unit, we must seek for something else? Suppose, then, that instead of trying to find a primal quantity, as we have done in the past, based upon so many cubic feet of space in a tenement, or so many cubic feet of air to breathe in a school or factory, or so much knowledge or opinion to be handed out as education, with so much allowed each day for food, and, by further attempting to confine that primal quantity by laws which throttle, bind, gag, and often kill—by conventions and customs which one generation discards as slyly and as gleefully as the preceding generation used them inhumanly—by an uncharitableness which seems to spring so easily from the smug belief in our own impeccability—suppose, then, that we really begin to try and find out what life needs.

What is the process of rightly feeding life? What are life's needs? And again we are caught in the same maze of bewildering details. The needs of life seem too abundant ever to be named or even numbered. But that ought to make it all the more clear that it is not our business to try and define the names and kinds of those needs, but their nature, as reduced to the simplest possible form. Fuel, we may say, is the primal need of life. Without it life could not exist. The body must have air, water, and food. We have no simpler term in which to state the need than fuel, for physical life is a process of continuous combustion. We even have faith that earth will yield all fuel that life requires. Fuel we may then leave as a need which requires no further definition of any kind.

But what then? What, having insured the preservation of the fleshly body, remains to be defined as a need? And here, again, we are tempted sorely to enumerate and to define in detail, and yet our answer must be found in a term just as simple and just as all-embracing as food. If we start upon a search for material things, we shall lose the clue at the start. That is where the Great Failure always begins. We forget that we need things only as a sort of collateral aid toward the realization of that other need. That things are, after all, but steps upon the road, and that, both in their creation and in their enjoyment, we are striving to satisfy a need which, in our ordinary daily life seems to have passed into the domain of our sub-conscious selves, only to be felt and realized in the fullness of its inevitable demand, when we are brought face to face with a great life or death experience. When we feel that unless we can satisfy that need, life will become unendurable. Let us, then, try to state this other need in a single word and agree, for at least a moment, that what life needs is to love!

If we agree, then we must admit that nothing is possible without a provision for amply and fully satisfying that need. To say that life needs work, or play, as we usually do when we attempt to define and classify, is merely to assert that these are the great arteries that nourish and sustain the healthy body. Do we not know that in these things there is no health unless there be love? No man who does not love his work, either for itself, or who does not love the doing of it through love of something else, can ever gain his spiritual freedom or grow into the fullness of man. No one can play who does not love to play, and loving play is only a part of loving work. Indeed, we to whom beauty has come to mean so much, no matter in what form she greets us, know very well that between the beauty we know in art and the beauty we find in living work, there is an unmistakable kinship with play. In doing any work well, for the sake of doing it well, the worker could rarely say whether he was working or playing. But, whether consciously or unconsciously, he or she surely would be loving at such a moment. Is it not in that simple condition, with its accompaniment of joy and freedom, that we

must look for the answer to that problem which we now seek to solve in terms of nations and of races, of autocracies and democracies, of taxation and profits, of consumption and production. They reel through the columns of our daily press like manikins, unflashed, dehumanized, and no more related to a consideration of the real needs of life than the pen is related to the sword. They are all things, grouped and regrouped, stowed and restowed, classified and reclassified, measured and remeasured, with the same amount of human relation bestowed upon them that the adding machine gives to figures. Yet, in the world of to-day, many are still and persistently thinking of reconstruction in those terms, so long has all thought of life and life's needs been missing from any of their calculations.

That the prime spiritual need of life is to love requires not to be demonstrated. As a need, sometimes consciously known and followed to the death, sometimes unconsciously accepted and quite as blindly followed, it lies at the basis of all the religious movements which have swept like waves over the surface of that vast ocean which has rolled through the ages since life was. Looking backward we can visualize that measureless sea of faces, upturned, seeking something, animate or inanimate, human or divine, visible or imagined, to love. Is it not the one manifestation of life that stands out above and beyond all others, as we contemplate the world which has been, and which is, and is yet to be?

To-day we exalt love of country above all other love, setting it above love of wife and child for the man, above love of husband and son for the woman. Setting it indescribably above the love of human possessions, and even setting it above love of truth and justice, for men still say, "My country, right or wrong." Now, if we so dare to say what the highest love shall be, then how can we fear to seek the solution of the problem of reconstruction by starting from the point where we say that the test is applied. We might state the problem in the most practical way and quite easily come to an agreement, if we believe what we say, since if love of country be the highest type, then our unending effort should be to stimulate and inspire that love. Surely we cannot

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deny the part it plays in our lives, when we are face to face with such cosmic cataclysms as that which now shakes the world.

To those who so love, and who lay down their lives in that love, we accord the highest praise which we know how to confer, since we immortalize them in our national life. And they, in their love, are made wholly and completely free, for they serve without thought of gain or profit, or of fear of suffering. Death cannot appal them, and they greet it with an open heart.

But if we hold that the great need of life is to love, many will ask what they are to love? And many will arise to tell them. Thus begins the Second Act of the Great Failure. This question which has troubled life since time began has no slightest terror for all but a handful of men. It seems so easy to prescribe in a matter apparently so simple, and so, in our stupidity and our egoism, we have determined and defined not only what men shall love, but what they shall not love. Most of these determinations we have embodied in laws, or enshrined in conventions, or dogmatized in creeds, or framed as canons of art, or taste. But if we really mean to build a society in which the need to love shall be wholly satisfied, we must not begin by saying what men shall love or how they shall love it. Love has as many different tendrils as there are lives in the world. It has its own method of climbing and entwining itself. It follows its own laws and from them can never be swerved. Our fault is always in not trusting it. We say that it is bad or wrong to love some things and good and fine to love others. The truth is that love can never be wrong, nor can it attach itself to anything which is not good. The moment you try to insist, or pervert, or regulate and control it, love flees like the wind. Sometimes you hear the echo of a silvery laughter floating down the sky. Oftener you catch the faint murmur of a sob, childlike and filled with the note of the great tragedy—"and with no language but a cry."

If this is love's way—and it is—then our task is to provide the branches to which those infinitely varied tendrils may cling. Where do they grow? How can they be made to grow? What tree should we plant? What seeds should we sow?

Alas, one three is always with us. It is the one tree in the world of life with which healthy men and women cannot escape the contact. It is called Work. It is the natural object of love, is Work, but we have made it so unlovely that there is little about it to inspire the great mass of workers, and everything about it to make

them hate and despise it. And being denied this natural outlet for their greatest need, we fill the world with the hydra-headed monster of repression and suppression. To keep him from devouring society alive and from sweeping it from the face of the earth, we feverishly seek to appease it with a thousand forms of diversion. They range from the elaborate and the costly to the stupid, the vulgar, the suggestive. We work only to escape work! Love has gone out of it, because we would not let it be an end in itself but blindly made it a means to another and unlovely end.

In the midst of this ceaseless turmoil, this unending Babel of our prisoned life, this agonizing flutter of our pinioned wings, we hear, swelling above the composite murmur of the throng, the strident voices of those who continually do cry: "My religion will save you!" "My art will save you!" "I will save you with a tariff!" "I will save you with Free Trade!" "I will have you with better houses!" "I will save you with higher wages!" "I will save you with This Law, and That Law, and no Other Law can save you!"

By and by, for a moment, there comes a great silence, as though all the saviours had taken deep counsel together, and then there comes the loudest clamor of all: "We must educate the public."

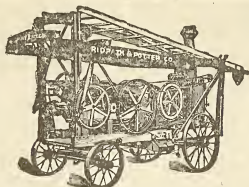
Underneath the fragment of sincerity which actually does exist, pitifully isolated in the self-seeking which animates the majority who follow the various banners, we do get in each of these cries the clear note of an unselfish purpose. But the reason—if reason we may call it—which inspires most of those who desire to accomplish this education of the public, springs from their wish for an appreciation of that thing in life which is dearest or most profitable to them. Let us say, for example, that it is architecture. But let us then ask, in return, how can there ever again be any really great architecture without love of work? What made the great architecture we love except the love of building for its own sake, or the love of building well because of a deeper

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love of something else. From the greatest monument in the world to the lowliest hatched cottage which charms us with its humanity, we cannot fail to see that the structure itself was born of the love of something, and that generally it inspired the workers who built it to so love their work that beauty flowed from it like clear water from a spring.

We essay to regain that art of producing beauty in structure, and yet the path we take leads in quite the opposite direction, for we make the work of rearing it less and less inspiring to the mass of workers through whose hands the materials must pass. They have no love to put into their work, and as a consequence the beauty which we seek is not there. We attribute it to lack of appreciation, to lack of education, to an absence of encouragement, and to the general commercial apathy toward all things which do not produce a profit. But, on the other hand, how can a small group of enthusiasts—and I do not speak of that smallest of groups wherein are found those who love architecture in sincerity and whose effort toward its restoration as the servant of men, in borne of their love for the art and not their wish to increase their earnings or add to their reputation—how can this group which deals for the most part in the echoes of a life that was, persuade the world to love their work when the world has for the great part, been prevented from really learning to love the essential methods by which great architecture has alone been produced? When it has been prevented from really learning to love anything, and led to seek an escape from all true work and the thought of it?

The need to love has been suppressed at the very source of the stream, for work is the primal tool of man. The right to love has been so defined and so determined by law and by custom that the unnatural has superseded the natural. Men try to love this thing or that, because they are told that they should love it. They refuse to love other things because they are told not to. Their own natural and unquenchable need to love never takes to its own wings and soars into un-

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known and uncharted seas, and thus the spirit atrophies, like any other unused thing, and becomes dead within us. It is that with which we are trying to reconstruct the world—dead spirit—and our only hope now is that through the tears and wounds of war, we shall be made whole again. That we shall see, at last, in the glass.

"Love is doubtless the last and most difficult lesson that humanity has to learn; in a sense it underlies all the others. Perhaps the time has come for the modern nations when, ceasing to be children, they may even try to learn it. . . . Hitherto we have hardly thought whether there was any inner laws or not; our thoughts have been fixed on the outer; and the Science of Love, if it may so be called, has been strangely neglected. Yet, if, putting aside for a moment all convention and custom, one will look quietly within himself, he will perceive that there are most distinct and inviolable inner forces, binding him by ties to different people, and with different and inevitable results according to the quality and the nature of the affection bestowed—that there is in fact in that world of the heart a kind of cosmical harmony and variety—and an order almost astronomical.

"Love is, as we have said, a real fact and its own justification and—however various or anomalous or unusual may be the circumstances and combinations under which it appears, it demands and has to be treated by Society with the utmost respect and reverence—as a law unto itself, probably the deepest and most intimate law of human life, which only in the most exceptional cases, if at all, may public institutions venture to interfere with.

"As a law unto itself!" As a law which we have so codified, dogmatized, bent to the needs of feeding our insatiable mechanistic maw, that it has been warped and twisted out of all recognition, and become bereft of all power to take its way according to its law. Hardly does it know what it needs, beyond the vague effort to cast the ductile anchor where it will hold. Rarerly does it find that haven, save after years of battling in the arena where men match their cunning against that of others, without thought of the blighting forces they let loose to bind and imprison the souls of those who, rather than being made free men by their work, are made the most abject of slaves. And yet, no less slaves are those who in turn have reduced them to slavery. It is all slavery. No one is free. All are caught in the giant mesh.

How strange to be writing this in the hope that it may be published in an archi-

tectural publication! What, will its readers say, has love to do with architecture? And being architects, or lovers of the arts, as they mostly are, their question will be reasonable, if of question my poor effort has still left them in need.

But one can only answer by saying that the word "Reconstruction" has opened up a path in a once impassable wood. All are free to pursue that path as far as their spirit may lead. To-day, only the more resolute and dauntless are beginning to hew their way. We catch the glimmer of their tools, as the letters come across the sea to us at home. They are seeing where soldiers have never seen before. The war has lighted their path and made the dark morasses to yield up their secrets. Across their way, like a cloud by day, we seem to see floating the ancient saying. It hovers silently over the wilderness of noxious weeds, poisonous vines, seductive blossoms, and appears to glow with a mysterious light, from neither sun nor moon nor star. There stand the words, long, long, forgot—"Man does not live by bread alone."

What does it mean? A thousand answers rise to each thousand pairs of lips, as one by one each tries to define, in words, the content of that saying. Yet all art of language fails utterly—all our skill at twisting words is of no avail. There is but one answer, no matter in what language we clothe it or with what fragments of thought we attempt to dress it up and make it look profound, and superior, and important—and ourselves look wise. In its very simplicity lies all its strength. Shatter that and you have broken the glass from which the wine will be gone.

Man must love, to live, is the only answer we can make to those who will not be content with the thought as it has come down to us. We cannot in any way make clearer than they are, those words which were born in minds whose very simplicity and humility made them infinitely more profound than ours, loaded up as they are with such a heterogeneous mass of things that we have no profundity left. What we cannot find on top of the pile must perforce go unfound—otherwise the frail raft on which we flounder would be upset. Never could it survive the search which would disturb the pile as we have built it. Any disarrangement, and we and our goods would tumble into the sea.

Therefore, one feels like repeating, Reconstruction, which is the word to which we are now committed, implies a starting-point—a basic unit around which to build—a new and ever-continuing growth destined to leave one habitation after another and for which we must leave the

way free and clear, taking care that in no way shall the natural law be interfered with. We cannot, manifestly, begin at that starting-point, even if we should be successful in finding it. There is no possible way of beginning all over again by wiping the present slate clean and burning all our bridges behind us. When the times comes for that to happen, another force will arrange and execute the wiping and the burning. Some of those bridges have been burned, we hope and believe, since we have now seen their futility and even their dangerous nature. But, for the most part, our way of working still must be to try and recover—by which many will perhaps think that Recovering is the word with which we should have informed our quest—to work carefully toward that starting-point until we have at last undone the wrong which has ended in condemning man to live by bread alone.

But let us be careful in this effort to undo. It is not to be accomplished by the simple addition of more laws to those we have. On the contrary we need to begin the process of gradually erasing our laws and of substituting therefor another and more potent mainspring to human action. One by one, we must blot them out, slowly increasing the measure of our freedom until we are able to possess and wholly enjoy it.

From a society which sets out upon such a quest as that, we may expect an architectural development which shall transcend all that has gone before. From a world which perversely clings to the worship of things and to the enslavement of men in their production and use, we may expect nothing save the muddled echoes of those who continually do cry out their witless protest.

But, one may ask, how can we begin? How shall we walk in order to work our way through the tangle and bend our steps toward the starting-point?—*The Journal of American Institute of Architects*.

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

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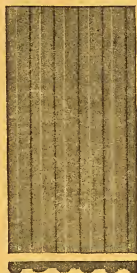
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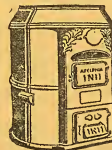
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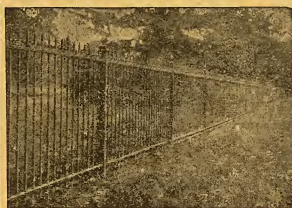
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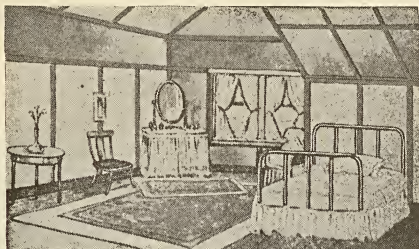
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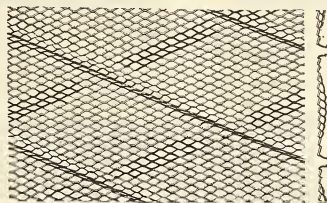
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 47

PHILADELPHIA
November 20, 1918

BUILDERS' GUIDE

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As The Editor Sees It



NO industry will profit more by the return of peace than will the building industry. Essential at all times, certain forms of construction have had to be curtailed during the war in order to speed its triumphant ending.

From all sides come sanguine and optimistic news of the outlook for building during the "Reconstruction" period.

The largest architect in New York City said recently:

"I have been urging my clients for the past six months to allow me to make the plans for their proposed new buildings." In most cases they have agreed to permit me to do this. I have more plans completed and ready for bids than I have ever had in my experience. It has been good judgment to have held my organization at work on these plans. They are better plans than I can make when the rush comes. My clients are ready to go ahead as soon as it is no longer unpatriotic."

Another architect of national reputation said, "I have five new houses to do. Each for a man who has made money during the war. Each one wants to live better. The higher prices of building materials will not deter any one of these clients. They are accustomed to paying more for everything they buy and they expect to pay more for their houses. They are not going to live in places they don't like just waiting for prices on building materials to come down. They are not accustomed to making money by such saving methods. They want new houses the

moment the restriction is lifted and they're going to have them."

Mr. Skillin, of the Snare & Trieste Company, is of the opinion that "it will take some time to complete those permanent or semi-permanent buildings needed by the Government, but once these are finished the contractor who has grown accustomed to handling man-sized contracts will go out seeking for new worlds to conquer."

"The day of the limited field for the general contractor is over. He has learned how to build buildings a thousand miles from his office with ease and success and he is not going to be satisfied with small local jobs as he has been heretofore.

"The horizon has been widened for every contractor in the country.

"The war has eliminated the inefficient small builder and given an enlarged standing to the building profession.

"I do not believe that the increased cost of building construction will deter many building projects. We are much underbuilt and so long as that condition exists the demand for materials will so exceed the supply that the prices are quite sure to be maintained at high levels."

We have before mentioned that the building industry would be a great factor in absorbing much labor which would otherwise be idle at the close of the war. That the Government realizes the great importance of this fact is shown by the immediate modification of restrictions so recently put on the building industry. E.

B. Parker, chairman of the priorities division of the War Industries Board, announces that:

"All of the rules, regulations, restrictions and directions embodied in orders and circulars issued by the priorities division of the War Industries Board are continued in effect subject to the following modifications:—

"Section 1—Section 5 of the revised circular No. 21, issued by this division as of date October 15, 1918, dealing with alterations or extensions of existing school houses, churches, hospitals and Federal, State or municipal buildings, involving in the aggregate a cost not exceeding twenty-five thousand dollars.

"(10) The construction of new buildings or structures not embraced in any of the foregoing classifications, or the repairs or additions to, or alterations or extensions of, existing buildings and structures, in either case involving in the aggregate a cost not exceeding ten thousand dollars.

"(11) The construction of new buildings or structures not embraced in any of the foregoing classifications, or the repairs, or additions, or alterations, or extensions of, existing buildings or structures, in either case involving in the aggregate a cost not exceeding twenty-five thousand dollars; when approved in writing by the State Council of Defense or its duly authorized representative.

"(12) Buildings begun prior to September 3, 1918, where a substantial portion of the building has already been constructed."

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"Second Section: All limitations on the production of building materials, including brick, cement, lime, hollow tile and lumber are hereby removed and the materials so produced may be sold and delivered for use in connection with any building project for which no permit or license is required under revised priority circular No. 21 as further revised by section first hereof, or to any project authorized by permits or licenses issued in pursuance of said circular. All limitations upon the production or use of lime or crushed or pulverized limestone in any form for agricultural uses are hereby removed."

Mr. McAdoo's attitude toward this phase of the "Reconstruction" period is evidenced by his order to resume work on post offices and other public buildings. Mr. McAdoo says:

"The changed conditions brought about by the conclusion of the armistice and the manifest inability of Germany to renew the conflict, emphasizes the importance of resuming with as little delay as possible the normal industrial activities of peace."

"Resumption of construction work by the Government will contribute toward facilitating the industrial transition of the country from a war to a peace basis and should serve to encourage others to undertake without delay the fulfillment of the many and varied industrial peace needs of the country."

Commenting on "Industry after the War" Charles M. Schwab, Director General of the Emergency Fleet Corporation, says:

"There will naturally be a short time in which men now employed in war work may be idle. An interim for the return to normal conditions is inevitable. But the natural demands for material from those fields that have been neglected in the past two years will keep our industries running to capacity for some time. The railroads need rails badly, to say nothing of freight cars and other equipment. The same conditions are true with regard to building construction, automobile manufacture and other lines of peaceful pursuit. It will be necessary to curtail certain standard industries which have been extended abnormally to meet the demands of war emergency. This will be offset, however, by the growth of other industries which have had to submit to reductions as a patriotic sacrifice to the exigencies of war."

The man with an order to place doesn't hunt you up in the city directory these days. He hasn't the time. If he can't find you in your trade magazine he can and does find somebody else; and that somebody else books the order.

ARCHITECTURE AFTER THE WAR.

Various agencies are at work reshaping the building industries. It is commonly asserted, for example, that the practice of architecture after the war will be distinctly different from what it was immediately preceding the war. One influence that promises to be active in promoting better types of construction is the intimate acquaintanceship with the older architectural forms of Europe, which the three million Americans, soon to be on the other side, will make. The beautiful old cathedrals and other forms of buildings typical of Europe with which the Yanks are familiarizing themselves will retain an educative value long after the boys return and the altogether too common crudeness of the American dwelling house and business structure will be one of the first and perhaps the only painful impression which the victors will experience in their home coming.

Another influence which is being rather widely commented upon by architects is the direct effects of the war upon methods of construction work. Just as American ships are now being built with amazing speed, undreamed of capacities being thus developed, so in the speeding up of cantonments, housing operations and other Government work, new systems, conducive to the essential haste, have been effectively adopted and the query is whether they will endure in the post-war times. Discussing what it considers "The Big Problem," the September "Bulletin" of the Illinois Society of Architects says:

"The architectural profession after the war will obviously be conducted on different lines than it has in the past. Perhaps the architects of the future will not be an individual but an organization. In the future probably to a much greater extent than at present, the successful architect must have in addition to all the attributes of the designer, a working knowledge of all the professions and trades allied to architecture; in addition to which he must be a trained business executive. Many architects to-day are maintaining that in addition thereto, the architect of the future will also be a contracting organization."

"If the profession is to retain its proud position as a profession and not become merged with the business of contracting, the architect of the future must not, as he now so often does, turn over to the general contractor much of the work and responsibility properly belonging to him. Any architect who agrees to perform complete professional services is guilty of fraud whenever he furnishes anything less than such service."

"Perhaps, after all, the theory upon which the profession has worked for many years that 'Architectural service is personal service' is a mistake. No individual will ever be able in the short span of a human life to qualify as an expert in all of the allied professions and trades which are a part of the great term 'Architecture.' Neither is it a physical possibility for any one man to, in person, handle the multitude of details incident to any large building operation. This

reasoning will obviously lead to the thought, 'Why should not architects be permitted to incorporate their business and be permitted to practice architecture as corporations?'

"It must be remembered, however, that if history justifies a forecast of the future, that architecture as an art will unquestionably prosper in America in the years to come as never before. It is only when a nation is prosperous that art flourishes and artists prosper. In the years after the war when our national resources and the energies of our people are no longer devoted to the arts that destroy, but to those of peace, may we not confidently predict that every architect will be employed in creating and building that Greater America, the America of the Future?"—"American Contractor."

In these days of strenuous service, when the nation is speeding up its industries to the very peak, of possibilities to win the world war as soon as possible, every wage earner is interested in military affairs, and before this war ends many more of the boys will be called to their country's service. It is important then they know something regarding that army of which they may be called to form a part. Here are some valuable facts. Cut them out and put them aside for handy reference. Put them in your hat, where they will be handy, then when some chaps are sitting around assuming to tell everyone what they know, as to what numbers constitute certain divisions of our army, remove your hat and then read the following to them:

An army corps is 60,000 men.

An infantry division is 19,000.

An infantry brigade is 7,000 men.

A regiment of infantry is 3,000 men.

A battalion is 1,000 men.

A platoon is 60 men.

A corporal's squad is 11 men.

A field battery has 195 men.

A firing squad is 20 men.

A supply train has 283 men.

A machine gun battalion has 296 men.

An engineer's regiment has 1,098 men.

An ambulance company has 66 men.

A field hospital has 55 men.

A medicine attachment has 13 men.

A major general heads the field army and also each army corps.

A brigadier general heads each infantry brigade.

A colonel heads each regiment.

A lieutenant colonel is next in rank below a colonel.

A major heads a battalion.

A captain heads a company.

A lieutenant heads a platoon.

A sergeant is next below a lieutenant.

A corporal is squad officer.

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Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Municipal Repair Shop (Alts.), 11th and Reed sts., Phila., \$10,790. Architect, Jos. A. Roletter, City Hall, Phila. Owner, City of Phila, care of Dept. of Public Safety, 215 City Hall. Cement work, electric elevator, dumbwaiter and miscellaneous repairs. Contract awarded to Geo. Dobbin, 42nd and Chester ave.

Fire Station, No. 10, 808 Morris st., Phila., \$2,444. Architect, Jos. A. Roletter, City Hall, Phila. Owner, City of Phila., care of Dept. of Public Safety, 215 City Hall. Mill work, doors, tin and slag roofing, painting, glazing, brickwork. Contract awarded to Hogg Const. Co., 1634 Sansom st., Phila.

Fire Station, No. 23, 7th under Norris st., Phila., \$889. Architect, Jos. A. Roletter, City Hall, Phila. Owner, City of Phila., care of Dept of Public Safety, 215 City Hall. Brickwork, painting, sheet metal work, tin work. Contract awarded to Geo. Dobbin, 42nd and Chester ave.

Add. to Bldg. No. 45, under Spec. 3252, on Submarine Battery Storage Bldg., Navy Yard, Phila., \$13,000. Architect, private plans. Owners, U. S. Govt., Navy Yard, Phila. Concrete foundations, 1 story, slag roof, concrete floors, rolled steel sash, roof ventilators (electric work reserved). Contract awarded to Turner Concrete Steel Co., 1713 Sansom st.

Wagon Storage, 1622-24 N. Bailey ave., \$2,500. Owner, C. D. Hackett, 1729 N. 33rd st., Phila. Brick, 1 story 36x87 ft., slag roof. Contract awarded to Geo. Kessler Cont. Co., Drexel Bldg.

Store and Dwelling (Add. and Alt.), 2603 S. 13th st., \$1,200. Owner, Keystone Naval Tailoring Co., 2603 S. 13th st. Brick, 1 story, 16x4½ ft. Contract awarded to Samuel Berger, 1950 N. 6th st.

Garage (Fire Repairs), 4730-32-34 N. Broad st., \$16,750. Architect, private plans. Owner, S. Levin, 4221 N. 9th st., Phila. General restoration, new roof. Contract awarded to Michael Kirschner, 421 Snyder ave.

Ware house (Add.), 226-28 Callowhill st., Phila., \$14,250. Architect, private plans. Owner, James Salin, 351 N. 3rd st., Phila. Brick, 1 story, 53x63 and 35x33 ft., stone foundations. Contract awarded to Conneen Const. Co., 1737 Filbert st.

Garage (Add.), 105 N. 63rd st., \$1,200. Architect, private plans. Owner, Nola B. Jackson 105 N. 63rd st., Phila. Brick, 1 story, 26x12 ft., slag roof, cement floor. Contract awarded to Edw. P. Doyle, 5250 Walnut st., Phila.

Garage (Add.), 57th and Willows ave., \$1,500. Architect, private plans. Owner, Geo. C. Williamson, on premises. Underground, additional excavation, brick and concrete work, cement floor. Contract awarded to Leroy K. Smith, 4007 Chester ave.

Factory Building (Alts.), Indiana ave. and "A" st., Phila. Architects, Ballinger & Perrot, 17th and Arch sts., Phila. Owner, Franz C. Merz, on premises. Brick work, interior alterations. Contract awarded to F. B. Davis, 240 N. 16th st., Phila.

Garage, Delaware ave. north of Comly st., \$1,000. Architect, private plans. Owner, Geo. Stock, on premises. Frame, 1 story, 10x16 ft., rubberoid roof. Owner will build.

Factory (Add.), N. W. cor. Somerset and Tulip sts., \$1,500. Architect, private plans. Owner, J. D. Grover & Sons Co., on premises. Brick, concrete footing, slag roof, tank support, addition, 1 story, 17x52 ft. Contract awarded to J. F. Welsh, 1723 Girard ave., Phila.

Shop (Add.), Dyott and Richmond sts., \$4,500. Architect, private plans. Owners, Cramp S. & E. Bldg. Co., Norris and Richmond sts. Brick, 1 story, 27x28 ft., slag roof, electric lighting. Contract awarded to F. A. Havens Co., 845 N. 19th st.

Dwelling (Alts.), 6128 Nassau st., Phila., \$600. Architect, private plans. Owners, Barton G. Levin, on premises. Frame, 20x14 ft., metal skylights, glazing. Contract

awarded to Samuel J. Rea & Son, 1608 Fairmount ave.

Dwellings (2), 605-07 S. 7th st., \$6,000. Architect, Herman H. Kline, 536 Mifflin st., Phila. Owners, Garrity Bros, 910 S. Broad st., Phila. Brick, 3 stories, 15x22 and 12x12 ft., slag roof, hot air heating. Owners will build.

Garage (Add.), 5739 Stenton ave., \$1,700. Architect, private plans. Owner, Abe Friedman, on premises. Brick, 1 story, 22x23 ft., slag roof, cement floor. Contract awarded to L. Cotter, 610 N. 2nd st.

Store and Office Building, 1712-14 Ludlow st., \$15,000. Architect, private plans. Owners, Frank P. Mellon Estate, Middle City Bldg., Phila. Brick, 3 stories, 75x32 ft., cement and pine floors, electric lighting, metal lath (heating reserved). Contract awarded to Geo. C. Dougherty, 1725 Ludlow st., Phila.

Workshop (Add.), 9th and Sedgley ave., \$1,200. Architect, private plans. Owners, Penn Globe Gas Co., 1934 Market st., Phila. Brick, 1 story, 15x50 ft., slag roof, cement floor. Contract awarded to J. H. Luigo, 42 N. 26th st., Phila.

PENNSYLVANIA

Construction News

Restaurant (Alt and Add.), Penn st. near 4th st., Reading, Pa. Architect, W. A. Fink, 426 Franklin st., Reading Pa. Owner, Wm. Poifer, on premises. Tin roof, hardwood floors, interior alterations, cabinet work, rolled steel skylight. Plans in progress.

Garage, Mineral Spring Road, Reading, Pa. Architect, A. A. Ritcher, 6th and Court sts., Reading, Pa. Owner, Max Luria, on premises. Reinforced concrete, 2 stories, 24½x31½ ft., concrete roof, cement floor, hot water heating, electric lighting, gasoline storage system. Architect taking bids. L. D. Focht & Son and Beard Const. Co., both of Reading, Pa., are figuring.

Houses (20), North Reading, Pa. Architect, W. A. Fink, 426 Franklin st., Reading, Pa. Owner, John H. Albrecht, 11th and Washington sts., Reading, Pa. Brick, 2 3-4 stories, 18x76 ft., tin roof, stone and concrete foundations, hot water heating, electric lighting, yellow pine floors. Owner will build.

Post Office Bldg., Store Bldg. and Apartments, Coatesville, Pa. Architect, W. Leslie Walker, 103 Park ave., New York City. Owner, Midvale Realty Co., Coatesville, Pa. Reinforced concrete, brick and steel, 2 stories, store, 46x36 ft., post office, 42x21 ft.,

slate and slag and tin roof, concrete and oak floors, stone or concrete foundations, steam heating, electric lighting, terrazzo work, hollow tile, metal lath, dampproofing (screens and electric fixtures reserved). Owners taking bids due as soon as possible. Pomeroy Const. Co., 1609 Ranstead st., Phila., is figuring.

Steel Foundry Extension, Lebanon, Pa. Architect, A. A. Ritcher, 6th and Court sts., Reading, Pa. Owner, Steel Foundry, Lebanon, Pa. Mill construction, brick, pattern shop, battery storage, executive's office, storage bldg., 1 story, 24x24 ft., and 2 stories and basement, 49x78 ft., steam heating, electric lighting, electric elevators. Contract awarded to G. H. Greiner, Lebanon, Pa.

Foundation for Water Tank, Fort Mifflin, Pa. Architect, private plans. Owners, U. S. Govt., care of Engineer, 315 Witherspoon Bldg., Phila. Wood piles, concrete work. Contract awarded to Lam Bldg. Co., 1001 Wood st., Phila.

Pump House, Spec. 3482, Fort Mifflin, Pa., \$4,598. Architect, private plans. Owners, U. S. Govt., care of Supply Office, Navy Yard, Phila. Brick, 1 story, 21½x27½ ft., asbestos shingle roof, cement floors, concrete foundations (heating and electric

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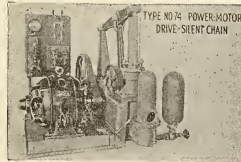
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lighting reserved). Contract awarded to Wark & Co., 1737 Filbert st.

Locomotive Shops (3), Marietta, Pa., \$2,000,000. Engineer, A. C. Shand, Broad

St. Station, Phila. Owners, Penna. R. R. Co., Broad St Station, Phila. Steel and concrete, 1 story, 600x400 ft., slag roof, rolled steel sash. Plans in progress. Too early for details.

NEW JERSEY

Construction News

Smithery, Blacksmith Shop, Coppersmith Shop and Electric Shop, Spec. 3501, Cape May, N. J. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Frame, 1 story, 62½x39 ft., ready roof, yellow pine and cinder floor, concrete foundations, steam heating, electric lighting, roof ventilators. Lowest bid submitted by Franklin & Henna, 25 W. 45th st., New York City, \$8,333.

Hospital, Municipal Colony, Trenton, N. J. Architect, Wm. Klemann, 1st Nat Bank Bldg., Trenton, N. J. Owner, City of Trenton, care of Mayor F. W. Donnelly, City Hall. Brick, 1 story, 40x80 ft., slate roof, stone foundations, vacuum heating, electric lighting, tile and marble work, concrete floors, hollow tile. Owners are sub-letting.

Toilet Building (Add.), Plainfield, N. J. Architects, Harris & Richards, Drexel Bldg., Phila. Owners, Niles Bement Pond Co., Plainfield, N. J. Brick and reinforced concrete, 1 story, 32x75 ft., slag roof, cement, composition and maple floors, mactite or gypsum block on slate rock, rolled steel sash, metal doors, heating and lighting reserved). Contract awarded to H. E. Baton, 1713 Sansom st., Phila.

Dry Kiln, Gloucester, N. J. Architect, private plans. Owners, Pusey & Jones, Gloucester, N. J. Frame, 96x64 ft., rubberoid roof, cement floors (heating and electric lighting reserved). Contract awarded to F. A. Havens & Co., 845 N. 19th st., Phila.

Church, Roebbling, N. J. Architect, R. A. Schuman, 932 Lambertson st., Trenton, N. J.

Owner, name withheld. Brick, 1 story. Preliminary plans in progress.

Dormitory, Trenton, N. J., \$3,000. Architect, F. H. Bent, State Capitol Bldg., Trenton, N. J. Owner, Board of Managers, State Home for Girls, Trenton, N. J. Brick, 2 stories and basement, 7x70 and 27x39 ft., slate roof, concrete foundations, steam heating, electric lighting, tile work, wood floors. Plans in progress.

Bridge, Trenton, N. J. Architect, Wm. Klemann, 1st Nat Bank Bldg., care of Rev. Fr. Hart, Trenton, N. J. Frame, ornamental iron railing. Architect taking bids due November 25th. Ed. La Rue, Trenton, N. J., is figuring.

Barn, Mt. Rose rd., Pennington, N. J. Architect, J. O. Hunt, 114 N. Montgomery ave., Trenton, N. J. Owners, Buckingham Farm Co., care of H. Broeger, on premises. Frame, 2 stories, 36x80 ft., shingle roof, wood floors. Architect taking bids. Samuel Wiley and Chas. Y. Barlow, both of Trenton, N. J., are figuring.

Coal and Oil Pier, Sectional Base, Spec. 3560, Cape May, N. J. Architect, private plans. Owner, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Timber construction, 48x24 ft., sheet iron coal chutes, plank floors. Owners taking bids due Nov. 28th. (Note extension in time.) Lam Bldg. Co., 1001 Wood st., Phila., additional bidders.

A hen is the only kind of a critter that can produce something by sitting down and doing nothing.—Exchange.

Delaware

Construction News

Hospital Buildings, Reedy Island, Del., \$102,000. Architect, Jas. A. Wetmore, Treasury Dept., Washington, D. C. Owner, U. S. Govt., care of Treasury Dept., Washington, D. C. Brick, steel and concrete. Plans about completed. Owners will be ready for bids in a few days.

Ice Plant, Penn and Union sts., Wilmington, Del. Engineer, Arctic Ice Machine Co., Canton, Ohio. Owner, Diamond Ice Co., care of Wilmer Stadley, 911 Market st., Wilmington, Del. Brick, 1 story, 150x100 ft., slag roof, stone foundations, cement floors, electric lighting. Plans will be completed in a few days. Owners will take bids.

Stable, 11th and Grant sts., Wilmington, Del. Architects, Brown & Whiteside, Dupont Bldg., Wilmington, Del. Owners, Diamond Ice Co., 911 Market st., Wilmington, Del. Brick and frame, 100x36 ft., asbestos shingle roof, concrete and wood floors, concrete foundations. Architects taking bids. W. D. Haddock Co., J. E. Healy & Son, Realty Const. Co., J. A. Bader Co., and H. D. Watts Co., all of Wilmington, Del., are figuring.

Office, Penn ave. and Grant st., Wilmington, Del. Architects, Brown & Whiteside, Dupont Bldg., Wilmington, Del. Owner, Diamond Ice Co., 911 Market st., Wilmington, Del. Brick, 2 stories, 20x36 ft., asbestos shingle roof, wood floors (electric lighting and steam heating reserved). Architects taking bids due Nov. 18th. W. D. Haddock & Co., 804 Orange st.; J. E. Healy & Son, 707 Tatnall st.; Realty Const. Co., J. A. Bader Co. and H. D. Watts, all of Wilmington, Del., are figuring.

Garage, 1520 Delaware ave., Wilmington, Del., \$1,600. Architect, private plans. Owner, T. C. Bradford, on premises. Brick, 1 story, 20x50 ft., slate roof, steam heating, electric lighting. Contract awarded to S. J. Newman, 1611 Rodney st., Wilmington, Del.

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Miscellaneous Construction News

Hospital Buildings, Cape Charles, Va., \$243,500. Architect, Jas. A. Wetmore, Treasury Dept., Washington, D. C. Owner, U. S. Govt., care of Treasury Dept., Washington, D. C. Brick, concrete and steel. Plans about completed. Owners will be ready for bids in a few days.

Storage Buildings (5), Naval Mine Depot, Spec. 3543, Yorktown, Va. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Steel, frame, concrete, steel trusses, asbestos protected metal siding, various sizes, built up roof, reinforced concrete, asphalt mastic finish floors, electric lighting, rolled steel sash, metal doors. Lowest bidder Hughes-Foulkrod Co., Commonwealth Bldg., Phila. Item No. 1, \$363,676, 145 days. Item No. 2, \$595,404, 175 days. Item No. 3, deduct \$1,983. Item No. 4, add \$1,750.

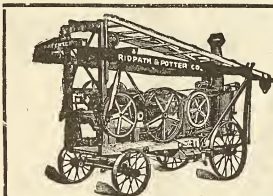
Magazine Buildings (10), Naval Mine Depot, Spec. 3544, Yorktown, Va. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Steel, hollow tile or brick and stucco, concrete foundations, built up roof, reinforced concrete mastic finish, electric lighting, steel doors, roof ventilators, damp-proofing. Lowest bidder, Boyle Robertson Const. Co., Evans Bldg., Washington, D. C. No. 1, \$119,000, 130 days. No. 2, \$229,000, 150 days.

Residence, Hurluck, Md. Architect, E. C. May, Dupont Bldg., Wilmington, Del. Owner, S. O'Neil, Hurluck, Md. Stucco, 2½ stories, 35x40 ft., slate roof, hardwood floors, vapor heating, electric lighting, tile work, hollow tile. Plans about completed. Owner will take bids.

Radial Brick Towers (20), Monroe, N. C., \$3,000,000. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Brick, concrete and steel, 500 ft. high. Owners taking bids due November 25th. F. W. Mark Cont. Co., Finance Bldg., Phila., additional bidder.

Magazine Buildings (10), Naval Mine Depot, Spec. 3544, Yorktown, Va. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Steel, hollow tile or brick and stucco, concrete foundations, built up roof, reinforced concrete mastic finish, electric lighting, steel doors, roof ventilators, dampproofing. Contract awarded to Consolidated Eng. Co., Calvert Bldg., Baltimore, Md. \$120,000-\$219,000.

Storage Buildings (5), Naval Mine Depot, Spec. 3543, Yorktown, Va. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and



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Docks, Navy Dept, Washington, D. C. Steel, frame, concrete, steel trusses, asbestos protected metal siding, various sizes, built-up roof, reinforced concrete, asphalt mastic finish floors, electric lighting, rolled steel sash, metal doors. Contract awarded to Hughes-Foulkrod Co., Commonwealth Bldg., Phila.

Emergency Hospital Bldgs. (10), Spec. 3620, Portsmouth, Norfolk, Va. Clean Group of 3070. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Frame, hollow

tile, brick and stucco, 1 and 2 stories, various sizes, ready, slag and slate roofs, concrete foundations, steam heating, electric lighting, rolled steel sash, iron stairs, cement and wood floors, hollow tile, metal lath, roof ventilators, waterproofing. Lowest bidder, Austin Co., Washington, D. C.

Hanger, Pavement and Marine Railroads, Hampton Roads, Va. Spec. 3623. Architect, private plans. Owners, U. S. Govt., care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C. Lowest bidder, H. P. Converse & Co, Norfolk, Va. \$195,000, 75 days.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage (Add.), west side 57th st. south Williams ave., Philadelphia, Pa., \$1,500. Geo. C. Williamson (O), on premises. Leroy K Smith (C), 4007 Chester ave.

Store (Alt.), 25 N. Juniper St., Philadelphia, Pa., \$500. Mrs. Keer (O), on premises. Smith Hardican Co. (C), 1006 Cherry st.

Store & Dwelling (Alt.), 1624 S. 8th st., Philadelphia, Pa., \$390. Rena W. Lieberman (O), 1608 Diamond st. Fred Quate (C), 1323 Snyder ave.

Apartment House (Alt.), 720 N. 20th st., Philadelphia, Pa., \$400. Mrs. Anna Yerkes (O), 724 N. 20th st. C. W. Bolton & Sons (C), 726 N. 20th st.

Store (Repair), 1641 Federal st., Philadelphia, Pa., \$300. M. Greenfield (O and C), on premises.

Dwelling (Add.), 1023 S. 19th st., Philadelphia, Pa., \$300. E. Taylor (O), on premises. Wm. G. Diggs (C), 1905 Nicholas st.

Club Dormitory and Cafeteria (Alt.), N. E. cor. Broad and Fairmount ave., Philadelphia, Pa. The Salvation Army (O), on premises. F. L. Hoover & Son (C), 1023 Cherry st.

Garage (Add.), 105 N. 63rd St., Philadelphia, Pa., \$1200. N. B. Jackson (O), on premises. E. P. Doyle (C), 5250 Walnut st., Philadelphia. Brick, 1 story, 25x12 ft.

Garage (Repair Fire Damage), 4730-3234 N. Broad st., Philadelphia, Pa., \$16,750. S. Levin (O), 4221 N. 9th st., Philadelphia. Michael Keyschner (C), 421 Snyder ave.

Warehouse (Alt.), 226-28 Callowhill st., Philadelphia, Pa., \$14,250. Jas. Salen (O), 351 N. 3rd st. Conneen Const. Co. (C), 1735 Filbert st. Brick, 1 story, 53x68 ft., and 35x33 ft.

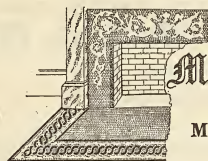
Tenement from Dwelling, 2142 W. Susquehanna ave., Philadelphia, Pa., \$600. Fred. W. Keifer (O), 22nd and Susquehanna ave. Frank R. Wintz (C), 1618 N. 27th st.

Storage Shed, 250 E. Cumberland st., Philadelphia, Pa., \$300. Wm. Brady (O), 2510 E. Cumberland st. J. W. Mortimer (C), 3024 E st. Brick.

Engine Room (Add.), 533 N. 4th st., Philadelphia, Pa., \$600. Jas. Kershaw (O), 4088 Haverford ave. Peter Heise (C), 4413 N. 4th st. Brick, 1 story, 19.6x25 ft.

Dwelling (Alt.), 2414 S. Broad st., Philadelphia, Pa., \$300. J. L. Christian (O),

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13th and Shunk sts. H. D. Prettyman (C), 2603 S. Broad st.

Church (Add. and Alt.), 1904 Reid st., Philadelphia, a., \$350. New Witt Boys' Church (O), on premises. J. E. Morris (C), 2219 Matona st. Brick, 1 story, 16x31 ft.

Flush Bulks, 2455 Kensington ave., Philadelphia, Pa., \$400. Jno. Russel (O), 141 E. Lehigh ave. Wm. Freiling (C), 2553 N. 5th st.

Dairy (Repair Concrete Bases), 1836 N. Sydenham st., Philadelphia, Pa., \$550. Herbert L. Syphrod (O), on premises. J. J. Nichenke (C), 1639 N. 18th st.

Fire Escape and Fireproof Doors and Windows, 221 S. 18th st., Philadelphia, Pa., \$1,500. E. T. Stotesbury (O), 1925 Walnut st. The John Balzley Iron Works (C), 514 S. Delaware ave.

Wabon Storage, 1622-24 N. Bailey st., Philadelphia, Pa., \$2,500. C. D. Hackett (O), 1927 N. 33rd st. Geo. Kessler Cont. Co. (C), 931 Drexel Bldg. Brick, 1 story, 36x87 ft., slag roof.

Store and Dwelling (Add and Alt.), 2603 S. 13th st., Philadelphia, Pa., \$1200. Keystone Naval Tailoring Co. (O), on premises. S. Berger (C), 1950 N. 6th st. Brick, 1 story, 16x46 ft.

Repairing Fire Damages and Alt., 219 S. Broad St., Philadelphia, Pa., \$11,140. Carl P. Berger (A), Penn Square Bldg. Wm. E. Adams (O), Mt. Airy, Phila. David McClelland (C), 4011 Baring st.

Boiler Room and Coal Bn. S. W. cor. 9th and Noble sts., Philadelphia, Pa., \$4,000. Swift & Co. (O), on premises. Monaghan & Losse (C), 3016 Chestnut st. Alterations structural steel and reinforced concrete.

Dwelling, 5630 Chew st., Philadelphia, Pa., \$500. John Rush (O), on premises. Harry H. Yerker (C), 4430 N. 19th st. Brick, 2 story, 12x14 ft., slag roof.

Dining Kitchen and Laundry, Frankford ave. and Wakelig st., Philadelphia, Pa., \$20,000. Frankford Hospital (O), on premises. Wm. R. Dougherty (C), 1610 Sansom st. Brick, 1 story and basement, 44.6x49 ft.

Dwellings (2), 6057 S. 7th st., Philadelphia, Pa., \$6,000. Garrity Bros (O and C),

910 Broad st. Brick, 3 story, 15x22 ft. and 12x12 ft., slag roof, hot air heating.

Garage, 4931 Peltson st., Philadelphia, Pa., \$500. M. S. Kirscher (O and C), 421 Snyder st. Brick, 1 story, 17x22 ft.

Build a Fence Wall, 6112-14 Girard ave., Philadelphia, Pa., \$920. John Hayse (O), on premises. Geo. E. Morris (C), 1328 Montgomery ave. Brick, 75x45 ft.

Store and Dwelling (Alt.), 3631 Walnut

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st., Philadelphia, Pa., \$525. S. E. Piper (O), on premises. W. E. Biscoe (C), 3954 Ludlow st.

Bay Window (Alt.), 2224 Tioga St., Philadelphia, Pa., \$500. T. F. Armstrong (O and C), on premises.

Dwelling (Porch Addition and enclosure), 6128 Nassau st., Philadelphia, Pa., \$600. Barton G. Levin (O), 6128 Nassau st. Sam J. Rea & Son (C), 1608 Fairmount ave. Frame, metal skylight, 20x14 ft., glass enclosure.

Garage, west side Delaware ave., north of Conly st., Philadelphia, Pa., \$1,000. Geo. Stpok (O and C), on premises. Frame, 1 story, 10x16 ft., rubberoid roof.

Factory (Add.), N. W. cor. Somerset and Tulip sts., Philadelphia, Pa., \$1,500. J. D. Grover & Son Co. (O), on premises. J. F. Welsh (C), 1723 Girard ave. Brick, 1 story 17x52 ft., brick and concrete, slag roof, and tank support.

Shop (Add.), south side Dyott, west of Richmond ave., Philadelphia, Pa., \$4500. Cramp Ship Yard (O), Norris and Richmond sts. Fred A. Havens (C), 845 N. 19th st. Brick, 1 story, 27x28 ft., slag roof.

REGIONAL SURVEYS--THEIR AIM AND IMPORTANCE IN WAR AND IN PEACE

BY GRANT LA FARGE

An Address before the Home Registration Service Committee of the
State Council of Defense, Chicago

THE privilege of addressing you has doubtless been conferred upon me, rather than on some more able speaker, because of a visit I made to this district something over two months ago, as in investigator for the Housing Bureau. I am not here to tell you how to do the work we have asked of you, for there is no need of that. The kind of talent and energy we have appealed to needs only to be told what is wanted. So I had better do just that, and say also why we want it. It will hardly be practicable to separate these two statements or to arrange them in any sequence, nor shall I try to do so.

First, then, as to the task of the Bureau of Industrial Housing and Transportation. As an arm of the United States Government in its paramount present undertaking, the winning of the war,

its function is to provide homes for those workers whose labor is essential to the production of the munitions with which the war must be waged. Where these homes are lacking in the vicinity of industries producing munitions, and by this lack production is impeded, the need is met in more than one way. It may be that vacant residences are discoverable within a distance that would be reasonable and satisfactory were improvements made in transportation; these improvements should then be undertaken. It may be that in the very neighborhood are vacancies not known about because no systematic effort has been made to find them; in this case, the systematic search is made, accompanied by the setting up of a Homes Registration Service to help connect the workman and the vacancies. And even with all these things done,

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houses may have to be built.

The demand is widespread and enormous, presenting itself mainly as an incident of the great industrial expansion due to the war. But concerning this demand in its very many and various aspects, it may quite fairly be said that the war urgency is really acting as a sort of searchlight upon things which the community has hitherto permitted to go, if not unobserved, at least uncared for. Because, although it may appear at first sight a rather simple proposition to determine, in any given case, that a given number of war-workers need houses and so to provide those houses, yet, as a matter of fact, when we begin to investigate the conditions that must be known in each case, we find that there is hardly any social factor safely to be left out of consideration. It is obviously of the first importance that whatever is built with the people's money shall not only produce the immediate result aimed at, the stabilizing of labor in sufficient quantity where required, but shall be also a good investment of that money. Therefore, we must make as sure as we can of two things: that what we do will be attractive to the workmen, that they will be content to live in what we build and want to stay there, and that the investment is one that will be absorbed by the community after the war. Otherwise there is a double waste.

As to attractiveness, it is not sufficient merely to build some good houses. They have to be of such cost that the basis of a fair, even if low, rate of return, they may be rented or ultimately sold at prices within the reasonable reach of the wage-earners who are to use them. Assurance is essential of proper health conditions; of adequate shopping and market facilities; of educational and religious and recreational provision.

To forecast the soundness of the investment, the industrial status of the locality before the war has to be ascertained, and the best estimate possible made of its stability when war-pressure ceases. To do this intelligently, we must know all we can of the whole body of industry whether or not now engaged in making munitions.

It is plain, then, that without in the least going outside of the wise limitations imposed by law upon our spending of public funds, we still are obliged to take

into our reckoning pretty much every factor of communal life before we decide when, where, how and to what extent to spend them. And here is where the searchlight comes in.

It is true that the influx of workers due to war activities often produces intolerable congestion; also that, for the same reason, local transportation systems are overtaxed. It is when the heavy burden falls upon you that you learn where your weak places are. And what we actually find, over and over again, is that if congestion did not actually show itself before the war, something very near it existed. By the same token, poor transportation was somehow tolerated until war exigencies made it insupportable. Aside from this are many things not due at all to the war: if workmen lived in slums; if the speculative builder furnished inferior houses to them; if industrial housing was squalid and dreary; if rational amusements were lacking for them and their children; if health conditions were bad; if employment agencies did little better than to increase labor overturn to their own pecuniary advantage; if renting systems looked no further toward usefulness than to collect all the fees they could; if water-supply was largely drained; if traction companies laid out their lines upon plans that suggested more the exclusion of rivals than the giving of convenient service—for these and such as these we may not hold the war responsible. But we may indeed say that the war has forced them upon our attention to-day, no matter how reluctant we may be to face and deal with such unpleasant facts.

I shall not attempt to detail what we have found in this district; you must all know it far better than I. Suffice it to say that it has appeared that various improvements in transportation were feasible and that some of these are already under way, with promise of beneficial results; that an unknown but apparently large number of vacancies in Chicago existed, and that these are being surveyed, while at the same time a Homes Registration Service is in process of establishment here, co-operating with branches in the Steel Towns, already rendering valuable service. * * *

To secure the required knowledge and understanding, a plan is necessary with,

of course, its accompanying report. To make such a plan, in the clear, suggestive, graphic way that architects and town planners know how, there must first be a survey to gather and to arrange the great multitude of facts which are to be expressed in the plan, as well as described in the report. But it is not enough that the plan should stop at a mere statement of what is, however beautifully presented. There is required the kind of constructive vision that will see and show how evils may be overcome, inequalities adjusted, awkwardnesses corrected, waste eliminated, order substituted for disorder; show further how every future step may be toward a known, foreseen, predetermined goal.

To the production of such a result the concerted efforts of many people must be invoked; to lead the work, to co-ordinate and combine the fruits of all the various efforts in such a plan as I have indicated, where could you go to find better or more proven skill and imagination than are possessed by the distinguished planners whom you have made your Committee? You will be in good company. Besides an interesting survey in the Boston district, there is the one made by the Philadelphia Chapter of the American Institute of Architects. This has been presented by Dr. Hammerschlag, Director of Industrial Research for the General Staff of the Army, to that Staff, to the War Industries Board, to our Bureau and to the War Department. The Journal of the American Institute of Architects states that "All agreed that such surveys were of vital importance, and well-nigh essential to the intelligent solution of problem which confronted the Construction Division, the Housing Bureau of the Department of Labor, the Ordnance Department, the Bureau of Storage and Traffic, and the Motor Transport Division." It speaks of a conference to be held by the heads of these agencies and indicates the need of a survey of the Baltimore district, "where there is now great congestion of traffic and a bad road system, and tremendous industrial expansion." Here, surely, is an indication of the widespread value that such work will have. We may even, without being fantastically optimistic, permit ourselves to imagine its extension, region by region, to the point where we shall have some-

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thing like a great National Survey.

Gentlemen, before I close, I beg your patient with what I wish to say concerning the patriotic aspect of this undertaking, as I see it. To win the war we must undoubtedly win a military victory. But if we would make our victory in very truth complete, there is more than that for us to do. For if it be true of a man that should he conquer himself he is greater than one who takes a city, the same thing is also true of that aggregation of men we call a nation. The war lays upon us all a stringent necessity for work and sacrifice; it also offers to us an almost unimaginable opportunity. The justification of the sacrifice is to be found in the seizing of the opportunity; unless we shall do this, then at least a great part of our lavish outpouring of blood and treasure will have been in vain. But if we look clear and unafraid at what the fierce searchlight of the war reveals to us

of our failures, our shortcomings, our unthrift and our injustices, and if then we strive with all our strength and all our intelligence to cure these things and set them straight as a heritage for those of our children who may mercifully be allowed to live and carry out our destiny, then indeed it will have been far from in vain—then we may face the rising generation unashamed.

This is why we have felt it but right to propose to you the rendering of a service which will tax your resources of skill, of knowledge, and of money, but which will be a real service, far-sighted and constructive, immediately to us in the work we are charged with, ultimately to your whole community. That you can render it, and brilliantly, no doubt whatever is in our minds, and so with that confidence we commit the undertaking to your able hands.

FIREPLACES

FROM the point of view of modern scientific efficiency the open fireplace is probably the most extravagant and wasteful of all devices for warming a room. What may be its maximum delivery of B. T. U. per pound or per dollar's worth of fuel consumed I do not know, but it must be small if measured by its power to raise the temperature from 0 to 68 deg. ten feet away from the fire. It has a marvelous capacity for casting heat-shadows in which one may shiver while the intervening object or person is slowly roasting on the side toward the fire. It requires incessant attention to keep its rapacious maw properly supplied with hardwood (3-foot lengths, \$29 per cord; 2 foot-lengths, \$35); and as a scorcher of rugs, a discharger of live-coal shrapnel on to the hardwood floor, and a most prolific cause of country-house fires, it can claim a record all its own. Whether built on the generous scope of the spacious country house living room, for three and four-foot lengths of cordwood, or on the minute specification of the California or the London boarding house coal grate, it is messy and troublesome, with its dust and ashes, its smoke and soot. It is as sensitive and capricious as a neuroasthenic female, sputtering and complaining in one wind, refusing to burn in another, especially in cold weather, and roaring with enthusiasm on mild days, and always as fussy about its food as a dyspeptic patient. When not in use it must be suppressed and hidden by a more

or less artistic camouflage of green boughs or autumn leaves—a most cluttering nuisance—or obliterated behind an unsightly "blower," that sheet-iron contraption primarily designed for use as a persuader of its laziness into action.

It has one advantage, however, over the radiator and hot-air register—an advantage highly appreciated by bachelors, absorbers of the fumes of nicotine leaves, and lazy housemaids—it is a most convenient and capacious catch-all. It accepts willingly and indiscriminately cigar stubs, half-smoked "fags," burnt matches, pipe-empties and the contents of the waste-basinet and of the housemaid's dust-pan. The result is not slightly, but the next time the fire is persuaded to burn between the fireplace jambs, all this *debris* of the household life is more or less consumed. Every hygienist will tell you that combustion is the surest, completest and most sanitary process for getting rid of rubbish. If only the fireplace would consume its own smoke and ashes, and deliver its hot airs, purified, into the room instead of up the chimney!

Just at this point the agent of the gas company (returning from the installation of a new over-registering meter in the cellar in place of the former apparatus with whose performance the company seems to have been dissatisfied) whispers in my ear. The substance of his whispering is, that none of the objections I have raised against the open fire-

place applies to those provided with gas-logs. The gas-log place demands no provender of costly cordwood or coal. It emits no smoke, produces no ashes, discharges no burning projectiles onto the floor, balks never at northwest or east winds, and kindles instantly at the first lighted match. It is clean, convenient, reliable. True, thou faithful minion of a soulless corporation; but alas! the gas-log place lacks the one great virtue I have described to the fireplace; it has no maw for cigar butts, burnt matches, waste-paper and household dust.

... *Quoe cum ita sint* (as we used to write in our Latin prose books in high-school), since these things are so, how comes it that an obstinate public persists in demanding open fireplaces in country houses, and even in city houses and costly apartments? With all the resources of modern science for providing heat and ventilation, what crass stupidity it is to resort to this ancient, old-fashioned, wasteful, troublesome, messy device for inefficient calorification! Are not steam heating and hot-water heating, and hot-air heating, and gas heating and electric heating among them all sufficient for the needs of all our householders? Why not be content with the Johnsmith under-feed furnace, which will run a week (or less) without restocking; or the Smithjohn hot-water system, which, installed in your front parlor as an ornament, will keep your seven-room house warm for twenty-four hours with one shovelful of coal; or the Acme low-pressure steam heater, which can be run by a six-year-old child and is guaranteed to be 30 per cent. cheaper in fuel than any other steam-heating system? Then there are the gas radiators, and the indirect-direct-radio system of the Camouflage Heating Co. (Messrs. Freezum and Robem), which provides for heating your dinner-plates on the dining-room radiator and drying your wet galoshes over the parlor register while regulating itself accurately to 68 deg. in all rooms in all weathers. And yet people—educated people, people even of moderate means—will insist on risking the burning-up of their houses, and on burdening themselves with endless trouble, by building and maintaining open fireplaces!

II

It is a chilly October day. The nearly leafless trees are waving and sighing in the east wind, and a cold drizzle has soaked the landscape under a gray and lowering sky. Mr. Commuter has just returned from town. He deposits his dripping umbrella in the stand, hangs

bedraggled overcoat on the rack, and, after returning Mrs. C.'s osculatory greetings, is advised to take off his wet shoes. He obeys and starts in stocking-feet to set them on the dining room register. Alas! the furnace fire has not been lighted! "We tried to start a fire this morning," explains Madam C., "but it wouldn't go, except out. I don't know what is the matter with the drafts." The house is cold, and the shoes, accompanied by Mr. and Mrs. C., resort to the kitchen range for warmth. Althea, the African cook, finds the shoes, their owner, his wife and the two children much in the way of the preparations for dinner. Mr. C. flees upstairs to his cold room to change his wet clothing, and returns a half-hour later to dinner, dry but chilled.

After dinner, the kids safely in bed at last, Mr. C. and his spouse are forced to take refuge with their neighbors next door, the clatter of dishwashing and the steaming fragrance of the kitchen failing to attract them. Mr. and Mrs. Neighbor give them a warm welcome and a sympathetic one, for their steam-heater is out of commission pending the arrival of the much-demanded and overworked plumber; but "fortunately," says Mr. N., "we have plenty of cordwood in the cellar, and our good old fireplace; after all, we couldn't do without it even when the steam is on." Around its crackling blaze the shivering Cs. thaw out, physically and socially, and they resolve not to renew the lease of their heartless house, which has all the modern improvements but few of the old comforts.

The above is what a little friend of mine would have called "an imagination story," but it is in its fundamentals as true as the truth. There is nothing that can take the place of the open fireplace, particularly of the wood-burning fireplace, with its spacious opening and broad hearth, despite its ashes and its explosive discharges and necessary fender. There are enterprising advertisers who would foist upon us all sorts of substitutes for the antique amenities of domestic life. There is a famous and very "modern" school building, in a mid-western city, in which the landscape, the blue sky and the breezes are carefully excluded by closed windows of ribbed glass, and light admitted only from the north, while elaborate machinery pumps a specified amount of filtered air at a given temperature into the room. The "advanced" scientific educators of that town have decided that sunshine is bad for the eyes, drafts for the throat, and the view of the landscape for the mental

concentration of the pupils. Poor-pupils! What artificial ventilation ever could take the place of sunshine and the winds of heaven; what air, sifted and sprinkled and passed through the most scientific coils and whirling fans, can compare with the un-machined, natural breath of the fields and woods and sea, blown by Acolus or Notus, Boreas or Auster, over grass and flowers, through the balsamic forests or across the measureless prairies, the undiluted drafts from Nature's cup of health and vigor? And what heat, generated over scientific gîtes and transmitted through coils of steam-pipes, can ever take the place of the genial warmth of a glowing, crackling fire on the hearth of an open fireplace?

The open fire on the hearth is more than a heat-producer; more even than a generous ventilator: it is a social benefactor, a promoter of domestic felicity, the central feature and altar of a sacred rite, an emblem of all that is holy in the human spirit and affections. Heat without visible flame is heat with half its value gone; it warms the limbs, but not the heart. Away with substitutes; let us leave all the science of the *Ersatz* to the Boches: fake tobacco, fake bread, fake leather, fake cloth, fake treaties and fake victories! We must, of course, in our climate and under our present civilization, resort to furnaces or stoves for the steady and systematic raising of our winter temperatures from 0 deg out-of-doors to 60 deg. within the house; but we cannot forswear that puissant and genial ally of domestic comfort, the fireplace. Pile on the wood—or if it must be so, the coal—and let us gather about the sacred flame, join heart to heart in intimate discourse, or silently watch the pictures which memory and imagination conjure up among the burning coals, while the merry youngsters of the family circle and their friends toast marshmallows or pop corn over the embers, and exchange their youthful quips or their lovers' glances amid the flickering lights and shadows. The house, the cottage, the bungalow, however small, can and should boast at least this one luxury, whatever it may lack of electric lighting and interchangeable furniture and nickel-plated fixtures.

III

The fireplace has a long and honorable ancestry; its pedigree is longer than that of the proudest family of Europe. Civilization began with the discovery of the value of flame to man, and its progress can be measured by his control and use of fire. The fireplace traces its history

back to to open fire on the central hearth of the Aegean *megaron*—that primitive family room with a roof open in the centre for the ascent of the smoke. The *megaron*, with its four columns supporting the roof at the angles of the opening, was the germ alike of the Greek temple and of the Roman *atrium*, whose name preserves the tradition of the hearth. It was but an architectural elaboration of the simple scheme of the Indian's wigwam or tepee.

The first step in the evolution of the open fireplace from the central hearth of the *megaron* seems not to have been taken for over two thousand years. It was the apparently obvious step of providing "a collecting-hood or mentel (mantle) over a hearth placed at one side or end of the room, with a chimney to carry off the smoke above the roof. It does not appear that the ancient Romans thought of doing this, though they devised elaborate systems of heating by means of hollow floors of tiles and flues in the walls—the earliest known examples of central heating. It was in the Middle Ages that the mantle-hood, built out from the wall over a hearth at the end of the great hall, first came into general use in Western Europe. It still survives, greatly reduced in size, as a decorative reminiscence in various Renaissance types of chimneypiece, both Italian and French.

The next step of progress was due to the discovery that a smaller fire, built in a broad and deep niche in the massive wall, and having a hood not more than five or six feet from the ground, burned better, smoked less, and gave out more heat in proportion, than the old-time burning woodpile several feet away from the wall. With the sixteenth century, in France and England and North Italy, the progress of social refinement, demanding for greater privacy the multiplication of family rooms and the separation of the functions of cooking, eating, sleeping and entertainment into different apartments, brought about a corresponding multiplication of fireplaces with their chimneys, and a reduction in their size. The fireplace became more and more a work of art, employing the talent of noted architects and sculptors. The hood gradually disappeared. Through the seventeenth and eighteenth centuries its form and decoration underwent many changes, and it became the most conspicuous architectural feature of the salon and dining-room, in palace and private house alike. But the fireplace itself was unchanged in form or principle; it was always a simple rectangular

recess in the wall, with a rectangular flue leading directly from it, unmodified in throat or jamb or proportions by any scientific calculations.

I believe it is not so widely known as it ought to be that the modern fireplace owes such efficiency as it possesses chiefly to two American scientists of the late eighteenth century—Count Rumford and Benjamin Franklin. I refer the curious and eager reader to the encyclopedias for accounts of the fires and inventions of the Tory from North Woburn, Mass., and the Republican Philadelphian from Boston. Suffice it for the present occasion to say that it is to them that we owe the splaying of the jambs and the restricted depth of the fireplace, the contraction of the throat and the careful proportioning of the flue-section to the size of the fireplace. The ash-dump and chute came, I believe, from Baltimore—a device worthy of more general adoption. The "Franklin Stove" was, as all know, the invention of the great diplomat, scientist and philosopher whose name it bears; it is the nearest approach to a substitute for the fireplace, and doubtless more economical.

The American fireplace of to-day is a direct descendant from the fireplace of Colonial times. It is from our Colonial ancestors that we inherit the wooden mantelpiece, of whatever design. The Dutch colonists framed the opening in tiles, and the tiles in wood, and we do the same to-day. Wooden mantelpieces are rare in Europe, where a more imposing decoration in stone, marble or stucco is traditional; but architects whose hair is gray may remember that in the 'eighties the English architectural journals were wont to carry advertisements of "American wood mantels," which for some years found favor in London and elsewhere in "Queen Anne" and Norman-Shawesque "villas" and houses.

We have happily outgrown what seems to us the callow and groping taste of those days. We have rediscovered our long neglected Colonial inheritances in fireplace design as in other things. How endlessly varied the models they have left us, and yet how almost invariably invested with the charm of spontaneity, simplicity and refinement! Our modern designers have caught the spirit of the older work without slavish adherence to its details. And they have learned what is quite as important, to design independently where the Colonial models would be inappropriate, as about a fireplace of field boulders or in a suburban house of French or English feeling in its architecture. Brick and tiles

of various colorings and textures are used with notable skill; cut and carved stone take the place of wood in monumental and classic interiors. The plate glass mirror in a Louis XIV or XV or XVI frame of gold, which persists to this day in France as the inevitable traditional over-mantel feature, has seldom found favor with us except for rigidly stylistic "period" rooms, and the horizontal mirror between a lower and an upper shelf, that used to be, as it were, "in stock" twenty-five years ago, has gone the way of the mill-stock over-mantel of black walnut or golden oak of that period, with its spindles and brackets and panels, the last lingering vestige of the Eastlake and Queen Anne crazes of the last generation.

The fireplace is the most characteristic single feature of our American country house interiors, with the possible exception of the staircase. It is a wholly American product, owing but little to European precedent, even in its earlier forms. It is the central and dominant architectural feature of that very American element of the country house, the living room. The Frenchman calls his home his "foyer domestique." For him the family life, the family ties, the family traditions are identified with that "domestic hearth"; and the French family life, into which so few Americans ever penetrate and of which Americans know so little, has been one of the strongest elements in the character-building of that wonderful nation. We, too, cherish our family hearthstone as a memory and an idea, even when our restless and changeable life has broken up the family circle. We are much less attached to places and objects than the French; a house seldom remains in the possession of one family for more than two generations. The march of improvement, the inpouring of foreigners, the shifting of populations and industries, sweep away the old houses, and we outgrow the primitive simplicity of our grandfathers' dwelling. But the sentiment of the old home often survives all changes, and with maturing years the old memories acquire new potency and charm. It were well if this were more general; if as our land and people grow older we became more attached to the domestic hearthstone, and reunions about the fireplace before which our grandparents spent their wintry slipper-hours and our parents did their sparking became more frequent. All hail the "Old Home Week" and the Thanksgiving and Christmas gatherings of the house-children from afar—and may these soon

count among their number the brave men and women from over-seas, returning from their heroic and victorious defense of human liberties and outraged justice! They, at least, will know the preciousness of the home-coming, and the beauty and sacredness of the open fireplace become the altar upon which burns the cherished flame of family devotion and domestic peace. "The dear old family radiator"—No! "I long to sit once more with my dear ones around the parlor hot-air register"—Heaven, preserve us, never! But the fireplace may yet become to the nation the synonym of domestic happiness and a powerful element in promoting that stability, that sense of something permanent and changeless amid the shifts and currents of our national life, which we too much lack and greatly need. Let us, then, with conscientious art, build simple but beautiful fireplaces with ample hearths in every house.

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We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

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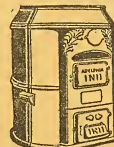
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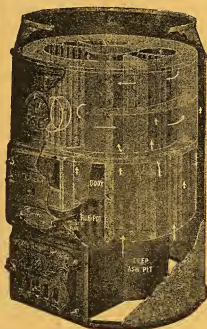
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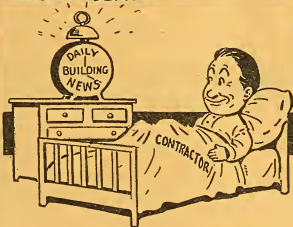


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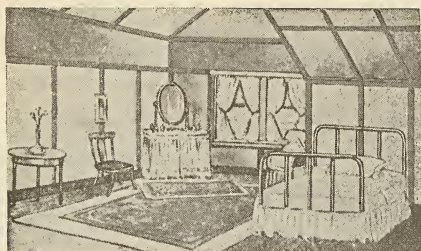
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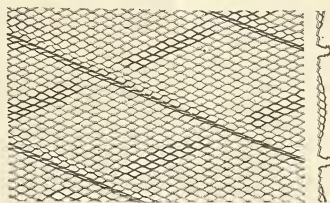
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BUILDERS' GUIDE

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Engineering and the Building Trades

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November 27, 1918

BUILDERS' GUIDE

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As The Editor Sees It



LOOKING at the different phases of the Reconstruction period, trying to grasp the immensity and diversity of the problems involved, we find it practically impossible to bring any order out of the chaos confronting us. Yet, surely and inevitably a scheme will be worked out whereby business after the war may maintain a proper balance and difficult questions be satisfactorily answered.

As a means of converting of the nation from a war to a peace basis, President Wilson favors the appointment of a reconstruction commission, whose mission would be advisory rather than executive, and would be representative of commercial, industrial, labor, agricultural and social interests. Establishment of such a board was recommended to President Wilson by Professor O. M. W. Sprague, an economist of Harvard, as well by the United States Chamber of Commerce.

This body will hold a meeting in Atlantic City on December 4th, 5th and 6th, to consider the grave problems of reconstruction. The meeting will consist of expert, representative men, chosen by the votes of every unit of their industry. The aim will be to create a federation of the War Service Committees by which the work of reconstruction can be carried on. Speaking of the conference, Mr. Harry A. Wheeler, President of the United States Chamber of Commerce, said:

My expectation for the structure of the federation is this: There will be gathered the War Service Committees of the in-

dustries—three hundred or more of them. Aside from the opening meeting on the morning of December 4th, there will be three great general sessions with not to exceed six addresses by leaders of business and public thought, the subjects being "Relations of Business and Government," "Economic Legislation," "Finance in the Post-War Period," "Industrial Relations," "Reconstruction and Foreign Trade."

Among the group subjects will be: "The Supply of Raw Materials After the War," "Will There Be a Shortage in Meeting the World Demand? If Shortage, by What Continued Governmental Aid Will Prices and Distribution Be Controlled and Stabilized So as to Eliminate the Elements of Speculation and Check the Hazard of Great Loss from Rapid and Extreme Price Fluctuation?" "What Commodities Have We Learned to Manufacture Formerly Absorbed from Abroad?" "How Can These Industries Be Sustained When World Competition Again Ensues?" If there is to be no control of price in the post-war years on basic products, how are present inventories to be treated and losses arising from return to normal prices be absorbed?

The closing session, the afternoon and evening, if necessary, of the third day will be the great session of the conference in which all of the proceedings will be brought to a head and final action taken.

In order that there shall be no confusion with respect to the subjects that are brought back to the convention for its final consideration, we will create the first day of the meeting a Clearing Committee, and every conclusion that is reached, every resolution that results from the meetings of the War Service Committees singly or in related groups, or in major groups, will be typed and forwarded to the Clearing Committee who will have constant hearings on any of the questions that are brought forward, and who will bring to the convention on the final day the boiled down substance of all that has gone on through the three days. That is the general structure of the meeting.

I want now to talk to you about the ultimate object. If we are only going to Atlantic City for the purpose of listening to some addresses, of passing some resolutions, and of coming away again, we neither have time to go, nor is there transportation convenient for our going. Unless we have an object, and unless that object is sufficiently important to warrant that meeting, it never should be held.

I want to suggest that object. All War Service Committees to become federated; all related groups to become organized (and there will probably be about thirty-five of these), each electing its strongest and most representative man as chairman and ex-officio member of the Central Council. This council to guide American business through the reconstruction pe-

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riod. Obviously the council would choose to work through perhaps a board of ten or twelve of the most thoughtful and outstanding men in the business world.

Do you see the purpose? That American industry shall create a piece of machinery that is so flexible and so representative and so powerful in its ability to line up the industries, as to be able to lay down those conditions upon which reconstruction must take place; that its findings and conclusions shall have weight and influence with whatever government commission may be created to deal with this subject.

If, out of that great meeting, there comes the creation of the machinery for carrying forward the work of American industrial life during the days after the war, then it will have been a meeting historic in importance, and of a character that neither you nor I can afford to miss. To participate in it, to make possible the creation of the machinery that will carry us forward through the days of reconstruction will be a credit and a pleasure to think of in the days to come.

* * * * *

These and many now unknown problems await solution. Business men must guide organized business; must show that it is more than a name. Out of the Atlantic City meeting can come the instrumentality that will study and know the needs of American business, that will curb the selfishness of American business, that will make for a relationship with Federal agencies so clean and flexible that the reconstruction may be negotiated without chaos and the lessons of the war be retained as a guide for all the years to come.

* * * * *

The problem of labor and wages during the reconstruction period is one which causes uneasiness in many quarters, but, according to B. M. Anderson, Jr., Ph.D., in his analysis of conditions, published by the National Bank of Commerce, the readjustment will take place without any serious effect on the country's prosperity. Mr. Anderson says, in part:

"Although all prediction in economic matters is to be accepted with caution, we may expect the Civil War parallel to hold so far as falling prices and the absence of crisis caused thereby are concerned. But the continuance of business activity will have to rest on a square deal to labor, and on a generous policy of lending on the part of the United States, the one great country that has a large surplus.

"Europe has a sound basis of credit to offer. Her people are intelligent, efficient and accustomed to pay their debts. They are impoverished in the present, but their industry and frugality will give them

wealth in the future. Their great war debts, so far as held by their own people, need not seriously weaken their credit with the outside world. Even those weaker countries with large foreign debts may still secure new capital from outside on 'receiver's certificates,' or on pledge of special revenues.

"Our own interests are bound up in a magnanimous foreign policy. Especially must we let gold go freely when it will. Unless the rest of the world can revive its commerce and industry, it cannot buy our goods or pay its debt to us. International trade is a matter of reciprocal advantage. All the world shares in the prosperity of a country which plays the game fairly.

"But the game of commerce must not be played in the future as an adjunct to piratical diplomacy—nor must the game of diplomacy be played as an adjunct to selfish business. We must free the world from the German spirit, as well as from the German armies.

"If we are generous to our allies and just to our enemies, the whole world can revive together, and the prosperity of the United States will be assured.

"The belief that there will be a drastic drop in prices is based on obvious conditions. With a vast volume of labor rapidly being discharged from munition factories the world over to resume the production of normal supplies; with steel, copper, coal, shipping and other essentials released; with 50,000,000 soldiers returning to farms and factories, there will be an immediate increase in the volume of goods available for civilian consumption.

"Prices should fall, even before this actual transformation is carried far, because wholesale markets commonly forecast impending changes. Under ordinary conditions this would mean a business crisis with widespread bankruptcy. Yet, to take a historical precedent local to America, the veritable collapse of prices in the North, following the Civil War, produced no such crisis.

"The rise in Civil War prices was due chiefly to the depreciation of the greenback dollar. The prices were not gold prices, but paper money prices. High prices to-day in the United States, however, are high gold prices, representing real scarcities of supplies of almost all kinds. Foresight saved the business men of 1865. Foresight will save the business men of to-day.

"Discrimination in the use of taxation is necessary. Some taxes depress industry and trade; others do not. The taxes to meet the war debts, therefore, need not prevent industrial revival.

"The Federal Government, States and municipalities should have ready a pro-

gram of expenditures, building; railroad construction, river and harbor construction and other things, which they can put into effect if unemployment appears, but which they will not put into effect unless unemployment appears.

"Plans of this sort should be viewed as precautions, merely. There is reason to expect a large foreign demand, and to expect that a large volume of domestic demand, for new equipment and for consumers' goods, repressed by wartime prices, will spring at once into life as prices go lower.

"Falling prices will be accompanied by falling wages. The process of readjustment calls for tact and fairness on the part of both employers and laborers, and for skillful public guidance.

"Labor will do well to recognize that present wages cannot be maintained. Business men will do well to recognize that the achievements of labor in the direction of unionization during the war are permanent achievements. Both may be counted on to recognize these facts.

"Both labor and capital will find it profitable, instead of contending over inevitable facts, to consider their common interest in a large output.

"Before the connection between wages and output is made a necessary connection, at least another link must be introduced. This necessary link is to be found in such bargaining power on the part of the laborer that he is able to make sure of his share in the increased output. To this should be added some participation by the laborers themselves in the management of the shop, which will cause them to think about the problems of output and efficiency.

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Cafe, Woodside Park, Philadelphia. Architect, Herman Kline, 6th and Mifflin streets, Philadelphia. Owner, Edw. H. Lentz, 314 S. 17th street, Philadelphia. Frame, 1 story, 76x76 ft. (hexagonal), concrete piers, rubberoid roof, mineral flooring, electric lighting, cabinet work. Plans completed. Owner is ready for bids.

Fire House, 24th and Ritner streets, Philadelphia. Architect, Philip H. Johnson, Land Title Building, Philadelphia. Owner, City of Philadelphia, Department of Public Safety, City Hall. Brick and stone. Plans in progress. Architect will be ready for bids in about ten days.

Storage and Salesroom (Alt.), 36th and Gray's Ferry road, \$12,000. Architect, private plans. Owner, D. B. Martin Co., on premises. Brick work, raising roof of building to 12 ft. high, slaf roof and general alterations. Contract awarded to H. P. Friend, Inc., Norristown, Pa.

Freight Elevator Shaft (Alt.), southwest corner Broad and Sansom streets, \$7,500. Architect, private plans. Owners, Union League, on premises. Elevator enclosure, basement to 2nd floor, expanded metal fire-proof partition, 6x7 ft. Contract awarded to F. L. Hoover & Son, Inc., 1023 Cherry street.

Tank Support, McKean and Dilworth streets, \$1,600. Architect, private plans. Owners, The Texas Co., Widener Building, Philadelphia. Steel supports. Contracts awarded to Latta & Roberts, Drexel Building, Philadelphia.

Storage Building (Fire Repairs), 24 and 26 Bank streets, \$1,356. Architect, private plans. Owner, Wm. E. Miller, Agent, 400 Walnut street, Philadelphia. Mill work, plastering, painting. Contract awarded to John Duncan, 920 Walnut street, Philadelphia.

Steel Mill, Frankford, Philadelphia. Architect, private plans. Owners, Illingsworth Steel Co., Frankford, Philadelphia. Steel, concrete and brick, 1 story, 105x145 ft., slag roof, concrete foundations, rolled steel sash. Contract awarded to Irwin & Leighton, 126 N. 12th street, Philadelphia.

Power House, 36th and Gray's Ferry road, Philadelphia, \$6,750. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Brick and concrete, 1 story, 38x44 ft. slag roof, cement floor. Contract awarded to Chas. Colgan, 2065 S. Salford street, Philadelphia.

Garage, 4964 Thompson street, Philadelphia, \$1,000. Architect, private plans. Owner, Ferdinand Fagnain, 4980 Thompson street, Philadelphia. Brick, 1 story, 15x50 ft., slag roof. Contract awarded to Ernesto Forlini, 4906 Thompson street.

Shop, northeast corner 33rd and Gray's Ferry road, Philadelphia, \$2,000. Archi-

tect, private plans. Owners, Philadelphia Steel and Iron Co., on premises. Iron, 1 story, 40x90 ft., slag roof, cement floor, electric lighting. Owner will sub-let.

Stores and Dwellings (7), Dwellings (3), 67th and Elmwood avenue, \$59,500. Architects, Folsom & Stanton, 1328 Walnut street. Owner, Daniel E. Hogan, 6043 Columbia avenue, Philadelphia. Brick, 2 stories 20½x60, 16x48, 13x12, 16x60 ft., slag roof, steam heating, electric lighting, hardwood floors. Owner will build.

Garage, McCallum street west of Lincoln drive, \$2,500. Architect, W. Frisbey Smith, northeast corner Broad and Arch streets. Owner, Jas. N. Mitchell, 4 S. Farragut terrace, Philadelphia. Stone, 1 story and attic, 20x20½ ft., tile roof, cement and wood floor, electric lighting. Owner will build.

Garage, 6704 Lincoln drive, Philadelphia, \$1,800. Architect, W. Frisbey Smith, northeast corner Broad and Arch streets, Philadelphia. Owner, Jas. N. Mitchell, 4 S. Farragut terrace, Philadelphia. Stone, 1 story, 20x20 ft., tile roof, cement floor, electric lighting. Owner will build.

Factory (Fire Repair), 1537-39 N. Randolph street, \$7,500. Architect, private plans. Owner, J. H. Billington & Co., on premises. General repairs, slaf roof, hollow metal skylights and pine floors. Contract awarded to F. L. Hoover & Son, 1023 Cherry street.

Radial Brick Chimney, Stokley street north of Roberts avenue, \$5,140. Architect, private plans. Owners, American Insulation Co., on premises. Brick, 113 ft. high. Contract awarded to H. R. Heinicke, Stephen Girard Building.

Storage, 2422 N. Cawallader street, \$1,800. Architect, Andrew C. Bornzer, 744

Walnut street, Philadelphia. Owner, Geo. G. Melloy, 1419 Spring Garden street, Philadelphia. Brick, front addition 16x50 ft., 2 stories, rear, 1 story, 16x40 ft., slag roof, electric lighting. Contract awarded to H. H. Burrell, 206 S. Quince street.

Residence (Add.), Walker street and Linden avenue, \$1,400. Architect, private plans. Owner, N. Walter Dauter, on premises. Frame, 2nd story, 26x32 ft. Contract awarded to A. W. J. Williams, Linden avenue and Frankford avenue.

Bank (Alts and Add.), 7th and Dauphin streets, Philadelphia. Architect, Ralph E. White, Pennsylvania Building, Philadelphia. Owners, name withheld. Plans in progress. Too early for details.

Service Quarters and Mess Building, Pier "D," Navy Yard, Philadelphia. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood and concrete, 1 story, 200x41 ft., ready roof, concrete foundations, cement and wood floors, electric lighting, kitchen equipment. Owners taking bids due November 27th at 11 A. M. Wark & Co., 1737 Filbert street, are figuring.

Shipbuilding Slips, Nos. 2 and 3 (Add.), Spec. 3469, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete, 169x 124 and 148x128 ft., lobbies, storerooms, driveways, trigger pits, Passageways, slag roof, wood and concrete piles, hot water heating, electric lighting, rolled steel sash, concrete floors, hollow tile, safety treads, tin clad doors. Lowest bidder, M. H. McCloskey, 1620 Thompson street, \$263,263.

PENNSYLVANIA

Construction News

School and Chapel Building, Highland Park, Pa. Architect, Geo. I. Lovatt, 416 Walnut street, Philadelphia. Owner, St. Lawrence's R. C. Church, Rev. Maurice F. Cowl, Highland Park, Pa. Stone, 2½ stories. Plans in progress. Too early for details.

Residence (Alts. and Add.), Ogontz, Pa. Architects, Maganizer & Eberhard, 615 Chestnut street, Philadelphia. Owner, Harry B. Hirsh, 2215 Green street, Philadelphia. Plans in progress. Too early for details.

Post Office, State College, Pa., \$60,000. Architect, Jas. A. Wetmore, Treasury De-

partment, Washington, D. C. Owner, U. S. Government, Treasury Department, Washington, D. C. Brick and concrete. Plans in progress.

Post Office, Franklin, Pa., \$80,000. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owner, U. S. Government, Treasury Department, Washington, D. C. Details undecided. Plans in progress.

Post Office, McKees Rocks, Pa., \$65,000. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owner, U. S. Government, Treasury Department, Washington, D. C. Brick and concrete. Plans in

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Post Office Building, Store Building and Apartments, Coatesville, Pa. Architect, W. Leslie Walker, 103 Park avenue, New York City. Owner, Midvale Realty Co., Coatesville, Pa. Reinforced concrete, brick and steel, 2 stories, store, 46x36 ft., post office, 42x21 ft., slate, slag and tin roof, concrete and oak floors, stone or concrete foundations, steam heating, electric lighting, terrazzo work, hollow tile, metal lath, damp-proofing (screens and electric fixtures reserved). Owners taking bids due as soon as possible. Wark & Co., 1737 Filbert street, additional bidders.

Post Office, Sunbury, Pa., \$100,000. Architect, Jas. A. Wetmore, Treasury Department, Washington, D.C. Owner, U.S. Government, Treasury Department, Washington, D.C. Brick and stone. Revised plans in progress.

Pump House and Foundation for 250,000 Gal. Tank, Bethlehem, Pa., \$9,000. Architect, private plans. Owners, Bethlehem Steel Co., Bethlehem, Pa. Brick, steel and concrete, 1 story, 22x22 ft., concrete foundations, steel sash, concrete roof. Contract awarded to Pomeroy Construction Co., 1609 Ransstead street.

Residence, Latham Park, Pa. Architect, Conrad F. Neff, Odis Building, Philadelphia. Owner, John D. Williamson, Ogontz, Pa. Stone, 2½ stories, 36x70 ft., slate roof, stone foundations, hot water heating, electric lighting, hardwood floors. Plans in progress.

New Jersey Construction News

Church, Roebling, N. J. Architect, R. A. Schuman, 932 Lambertson street, Trenton, N. J. Owner, name withheld. Brick, 1 story. Preliminary plans in progress.

Dormitory, Trenton, N. J., \$30,000. Architect, F. H. Bent, State Capitol Building, Trenton, N. J. Owner, Board of Managers, State Home for Girls, Trenton, N. J. Brick, 2 stories and basement, 7x70 and 27x39 ft., slate roof, concrete foundations, steam heating, electric lighting, tile work, wood floors. Plans in progress.

Bridge, Trenton, N. J. Architect, Wm. Klemann, First National Bank Building, Trenton, N. J. Owner, Sacred Heart R. C.

Church, care of Rev. Fr. Hart, Trenton, N. J. Frame, ornamental iron railing. Architect taking bids due November 25th. Ed. La Rue, Trenton, N. J., is figuring.

Barn, Mt. Rose road, Pennington, N. J. Architect, J. O. Hunt, 114 N. Montgomery avenue, Trenton, N. J. Owners, Buckingham Farm Co., care of H. Kroeger, on premises. Frame, 2 stories, 36x80 ft., shingle roof, wood floors. Architect taking bids. Samuel Wiley and Chas. Y. Barlow, both of Trenton, N. J., are figuring.

Post Office, Woodbury, N. J., \$55,000. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owner, U.S. Government, care of Treasury Department, Washington, D. C. Brick and stone. Plans in progress. Too early for details.

Post Office, Vineland, N. J., \$60,000. Architect, J. A. Wetmore, Treasury Department, Washington, D. C. Owners, U.S. Government, Treasury Department, Wash-

ington, D. C. Brick and concrete. Plans in progress.

Theatre (Alts.), Atlantic City, N. J. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Globe Theatre Co., Atlantic City, N. J. Consists of ornamental plastering, cement floors, marble work, metal lath. Architects taking bids. P. M. Sax Franklin Bank Building; Ketcham & McQuade, 1029 Brown street, and John M. Tardley, 1716 Sansom street, are figuring.

MISCELLANEOUS CONSTRUCTION NEWS

Dwelling (Alt.), 1010 French street, Wilmington, Del., \$1,000. Architect, private plans. Owner, John O. Hopkins, southwest corner 12th and Walnut streets. Changing partitions and stairways, changing to apartment. Contract awarded to Chas. E. Anderson, 3 E. 13th street, Wilmington, Del.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage (Add.), 5739 Stenton street, Philadelphia, Pa., \$1,700. Abe Friedman (O), 5739 Stenton avenue. L. Cotter (C), 670 N 2nd street. Brick, 1 story, 22x28 ft.

Storer and Office Building, 1712-14 Ludlow street, Philadelphia, Pa., \$15,000. F. P. Mellon (O), Bryn Mawr. Geo. C. Dougherty (C). Brick, 3 story, 75x32 ft.

Store (Add.), 1726-28 Ludlow street, Philadelphia, Pa., \$5,000. F. P. Mellon (O), Bryn Mawr. Geo. C. Dougherty (C). Brick, second and third story, 75x32 ft.

Workshop (Add.), south side of Sidgley avenue, east of 9th street, Philadelphia, Pa., \$1,200. Penn. Globe Gas Co. (O), 1934 Market street. J. M. Luigo (C), 42 N. 29th street. Brick, 1 story, 15x50 ft.

Wood Coal Trestle, east side American north of Huntingdon street, Philadelphia, Pa., \$3,000. P. R. R. (O and C).

Store and Dwelling, 845-47 South street, Philadelphia, Pa., \$15,000. M. Frods (O),

845 South street. J. Gorchow (C), 4116 Girard avenue. Interior alterations.

Hotel, Delaware avenue and Pine street, Philadelphia, Pa., \$400. J. W. McClellan (O), on premises. The John Baizley Iron Works (C), 514 S. Delaware avenue. Fire escape.

Store and Cafe (Fire Damage and Alt.), 219 S. Broad street, Philadelphia, Pa., \$111.40. Wm. E. Adams (O), Mt. Airy road. D. A. McClelland (C), 4011 Baring street.

Dwelling (Add.), 2832 N. Hancock street, Philadelphia, Pa., \$500. Teresa McAnally (O), on premises. Wm. Marriott (C), W. Cambria street. Brick, 2 story, 11x3.9 ft., slag roof.

Store and Dwelling, 403 N. 69th street, Philadelphia, Pa., \$700. Julius Crass (O and C), 401 N. 60th street. Interior alterations.

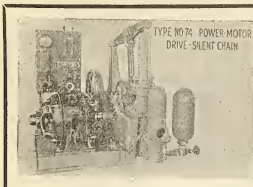
Second Story Addition, northwest corner

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Broad and Diamond streets, Philadelphia, Pa., \$550. Schuyler & Sons (O), on premises. Chas. A. Carr (C), northwest corner 29th and Ogden streets. Iron on iron, 2 story, 20x24 ft.

Dwelling (Add.), 720 S. 8th street, Philadelphia, Pa., \$700. F. Fruseadola (O), on premises. Dominick Ivo (C), 519 Christian street. Brick, 1 story, 12x14 ft., slag roof.

Dwelling (Repair), northeast corner Clarion and Kater Streets, Philadelphia, Pa., \$400. F. H. & G. W. Leamy (O), 618 S. 11th street. John Brynes (C), 1903 Tasker street.

Storage, 4450 Belgrade street, Philadelphia, Pa., \$400. Belgrade Leather Co. (O and C), on premises. Frame, 1 story, 16x50 ft., slag roof.

Garage, 4964 Thompson street, Philadelphia, Pa., \$1,000. Ferdinand Fagnale (O), 4980 Thompson street. Ernesto Ferlini (C), Thompson street. Brick, 1 story, 16x50 ft., slag roof.

Tank Support, south side of McKean street east of Dilworth street, Philadelphia, Pa., \$1,600. The Texas Co. (O), 610 Wedener Building. Latta & Roberts (C), Philadelphia, Pa. Steel tank.

Storage (Repair Fire Damage), 24 and 26 Bank street, Philadelphia, Pa., \$1,350. Wm. E. Millerage (O), 400 Walnut street. John Duncan (C), 920 Walnut street. New window frames, plastering, painting.

Storage and Salesrooms, west side 36th street north Gray's Ferry road, Philadelphia, Pa., \$12,000. D. B. Martin Co. (O), on premises. Harry P. Friend (C), Norristown, Pa. Brick, slag roof, raise roof of building 8 to 12 ft. high, and alterations.

Change Stable to Garage, 1615 Unity street, Philadelphia, Pa., \$1,000. Wm. J. Blackburn (O), 611 N. 3rd street. Cunningham (C), 4328 Paul street. Brick.

Shop (Add.), 2837-39 E. Cambria street, Philadelphia, Pa., \$1,000. Furness Withy Steamship Co. (O), Bourse Building. Philadelphia Ceiling and Stroedove Co. (C), Pier A.

Factory (Alterations), northeast corner A and Indiana avenue, Philadelphia, Pa., \$5,500. F. C. Merz (O), on premises. F. B. Davis (C), 240 N. 16th street. New brick wall on concrete foundations.

Store, south side Columbia avenue east Richmond street, Philadelphia, Pa., \$900. T. C. Ulmer (C), on premises. Albert Dell (C), 2635 E. Adams street. Brick, 1 story, 40x17 ft.

Dwelling (Repair Fire Damage), 8230 Norwood street, Philadelphia, Pa., \$450. Jas. Murry (O), on premises. A. Cair (C), 48 E Chestnut street. Brick.

Dwelling, northeast corner Reese and Somerset streets, Philadelphia, Pa., \$600. John Harvey (O), 2800 N. 5th street. Thos.



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McKeeley (C), 4411 Germantown avenue. Change hall to dwelling.

Shop, northeast corner 33rd and Gray's Ferry road, \$2,000. Philadelphia Steel & Iron Co. (O and C), on premises. Iron, 1 story, 340x9 ft.

Dwelling, 4338 N. Broad street, \$600. M. A. Felin (O), on premises. Thos. M. Keeley (C), 4411 Germantown avenue, Philadelphia.

Dwelling (Add.), west side of Walker street north of Linden avenue, \$1,400. N. Walter Dauter (O), on premises. A. W. J. Williams (C), Linden avenue east of Frankford avenue.

Power House, 36th and Gray's Ferry road, \$6,750. Barrett & Co. (O), on premises. Chas. Colgan (C), 2065 S. Salford street. Brick and concrete, 1 story, 38x44 ft., slag roof.

Garage, 2532 Harold street, \$600. Edw. Biggins (O), southwest corner 25th and Stevener streets. Chas. D. Land (C), 28th and Cambria streets. Brick, 1 story, 16x20 ft., slag roof.

Bake Ovens (2); 3875 Poplar street, \$1,600. H. Wolbronsky (O and C), on premises.

Bakery, northeast corner 57th and Race streets, \$750. Quaker City Quality Cracker Co. (O), on premises. David A. McClelland (C), 4011 Baring street. Underpinning south wall, foundations, stone and cement. Store and Dwelling, 2124 N. 15th street, \$400. Estelle D. Atkins (O), 2122 N. 15th street. Brick.

Department Store Tank Support, northeast corner 8th and Market streets, \$800. Lit Bros. (O), on premises. Keystone State Construction Co. (C), Franklin National Bank Building.

Temporary Storage, 30th and Spring Garden streets, \$500. Penna. R. R. Co. (O and C). Frame, 1 story, 16x48 ft.

Storage, 2422 N. Cadwallader street, \$1,800. Geo. G. Melloy (O), 1419 Spring Garden street. H. H. Burrell (C), 206 S. Quince street. Brick, 2 stories, 16x50 ft., and 1 story, 16x48 ft., slag roof.

Bake Ovens (4), 1111 S. Randolph street, \$1,600. Philip Sarta (C), on premises. W.

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Strabisky (C), 546 N. Randolph street. Brick.

Factory, 1537-39 N. Randolph street, \$7,500. J. H. Billington & Co. (O), on premises. F. L. Hoover Son (C), 1023 Cherry street. Repair fire damage, new roof & galvanized iron skylight.

Stores and Dwellings (7), Dwellings (3), 67th and Elmwood avenue, \$59,500. Daniel Hogan (O and C), 6043 Columbia avenue. Brick, 2 stories, 16x60 ft., 16x48-12x12-20x10 ft., slag roof, steam heating.

Garage, north side of McCallum west of Lincoln drive, \$2,500. Jas. N. Mitchell (O and C), 4 S. Farragut street. Stone, 1 story and attic, 20x20½ ft., tile roof.

Garage, 6704 Lincoln drive, \$1,800. James N. Mitchell (O and C), 4 S. Farragut street. Stone, 1 story, 20x20 ft.

Proposals

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., November 25, 1918. Sealed proposals will be opened at this office at 3 p. m. January 3, 1919, for the construction of the United States Post Offices at Park City, Utah, Newburyport, Massachusetts, and Mount Carmel, Illinois; also at 3 p. m., on January 6, 1919, for the construction of the Post Offices at Bakersfield, California, Lancaster, South Carolina, and Caribou, Maine; also, at 3 p. m., on January 7, 1919, for the construction of the Post Offices at Woodbury, New Jersey, and Fremont, Ohio, and for the extension, remodeling, etc., of the Post

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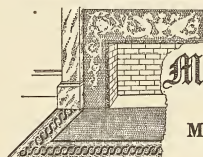
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Office and Court House at Alexandria, Louisiana; also, at 3 p. m., on January 8, 1919, for the construction of the Post Offices at Prescott, Arkansas, Cody, Wyoming, and Waterloo, New York; also at 3 p. m., on January 9, 1919, for the construction of the Post Offices at Orange, Texas, and State College, Pennsylvania, and the Post Office and Court House at Durango, Colorado; also, at 3 p. m., on January 10, 1919, for the construction of the Post Offices at Front Royal, Virginia, and Vineland, New Jersey; also, at 3 p. m., on January 13, 1919, for the construction of the Post Office at West Point, Georgia, the Post Office and Custom House at Fort Fairfield, Maine, and the Post Office and Court House at Globe, Arizona; also, at 3 p. m., on January 14, 1919, for the construction of the Post Offices at Southbridge, Massachusetts, Cherokee, Iowa, and McKees Rocks, Pennsylvania;

also, at 3 p. m., on January 15, 1919, for the construction of the Post Offices at Long Island City, New York, Kenton, Ohio, and Bellefourche, South Dakota; also, at 3 p. m., on January 16, 1919, for the construction of the Post Offices at Winchester, Massachusetts, Eldorado, Kansas, and Shawnee, Oklahoma; also, at 3 p. m., on January 17, 1919, for the construction of the Post Offices at Franklin, Pennsylvania, Cohoes, New York, and Buffalo, Wyoming; also, at 3 p. m., on January 20, 1919, for the construction of the Post Offices at Harrisonville, Missouri, Owego, New York, Decatur, Alabama, and Sunbury, Pennsylvania. Drawings and specifications for the several buildings may be obtained from the Custodian of the site in each city, or at this office, at the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.



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A. Enforcement and legal instructions.
B. Definitions of words and terms.
C. Classifications of buildings in groups according to types of occupancy with respect to danger or menace to life, limb or property.

D. Grading of types of construction into groups according to the resistance hazards afforded by the materials and their arrangement.

E. Requirements for minimum allowable construction, grades for each class of occupancy, based upon the hazard of each.

F. Safety regulations containing requirements for exits in the form of doors, stairways, fire escapes and other means of exit.

G. Safety regulations containing requirements for fire preventive and fire lighting apparatus.

H. General regulations for measures to prevent the spread of fire.

III. General Engineering Regulations.

A. Plan for interpretation and enforcement of the various sections.

B. Definitions of the various words and plans.

C. Floor loads for each kind of building occupancy.

D. Regulations for quality of materials to provide strength requirements. (This should be in the form of requirements for performance, and results to be accomplished, and not specifications or prescribed method or processes for obtaining results.)

E. Regulations for quality of materials as required for fire resistance. (This regulation should be in the nature of a standard for performance accomplished by fire test specification, and be administered as above for strength. It consists of a set of physical test standards for each of the necessary grades.)

IV. Special Engineering Regulations.

A. Special ordinance regulating steel construction.

A MASTER CHART FOR CODES

A Scientific Analysis of the Elements to Be Considered in Devising Building Regulations.

By John A. Ferguson, Secretary-Engineer, Building Code Committee, Pittsburgh, Pa.

Building laws of the past have not been planned with systematic management of the matter in view. In fact, it would seem as if in the majority of cases the various provisions had been jotted down and left in the document in just the casual sequence of their occurrence to one whose mind was not framed to arrange and classify in order the available information. This very common defect renders much uncertainty in the use of the document. Regulations on a specific subject are hard to locate and are more often than not conflicting in their nature. Bibliographies of a subject have often resulted in finding many conflicting provisions, and also have shown that the provisions when brought together were absurd and unenforceable, while if separated their absurdity was not apparent.

Thus it will be seen that a building code is in as much need of systematic planning and arrangement as any other business or scientific work. So much of the building code concerns itself with scientific matter and engineering materials that the systematic outline of such portions of it is indispensable if the code is to be correct in detail and readily usable.

The proper outline for a typical building law will follow the outline given below:

I. Administrative Sections.

A. Organization of administrative force.

B. Statement of general legal powers and duties of administrative force and outline of methods of interpretation and enforcement.

II. Central Building Regulations.

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B. Special ordinance regulating reinforced concrete construction.

C. Special regulations for various building materials and forms of building construction which must be regulated in detail.

V. Special Building Regulations.

A. Regulations for classifications of buildings which are peculiarly hazardous, such as the congested factory, store, theater and assembly buildings of various kinds, and buildings in which the fire hazard is heavy or easily set off, as well as those in which are materials which are explosive or become so upon being mixed.

B. Special regulations covering safety of handling of explosive or highly inflammable materials.

C. Special regulations covering safety requirements during erection and demolition of buildings.

VI. Regulations for Fire Zones.

A. Descriptions of area of fire zones.

1. High value district, containing highly valued buildings closely crowded together.

2. Moderate value district, containing buildings of moderate value spread further apart relatively.

3. Low value district—residence districts and all remaining area within the city limits not included within 1 and 2.

B. Regulations for minimum allowable fire resistive construction which should be permitted in each of the above districts.

VII. Fire Prevention and Preventive Apparatus.

VIII. Fire Fighting Regulations and Apparatus.

IX. Plumbing Regulations.

X. Electric Wiring Regulations.

XI. Health Regulations.

XII. Elevator Regulations.

XIII. Regulations for Zones for Business, Manufacturing, Mercantile, Residence and Other Building Occupancies.

(These regulations should take into account the inconvenience to persons and loss of property values occasioned by those who build or occupy buildings in an especially obnoxious and dissimilar manner from all other buildings in the neighborhood and zone, regulate and guard zones against encroachments, for each of the principal classes of buildings.)

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XIV. Creations of Appeals Board.

A. Creating board and describing personnel.

B. Describing powers and duties of board.

C. Providing rules and regulations under which board must act and work.

D. Regulating the work of the board of standards in such a manner that they will approve or disapprove of materials and forms of construction under the standards provided in the building law,

and the board of appeals hear and decide appeals from the administrative officers when they feel they have been wronged by the decision of administrative officers.

The building of a building code is deserving of being called a science. Enough scientific subjects come under its provisions to occupy a corps of building experts, engineers, and scientists for many years to come. It is capable of being, and if properly planned should be, subjected to a very scientific analysis.

A CONSTRUCTION SAFETY ENGINEER

The Work He Performs, and How He Secures the Co-operation of Superintendents, Foremen and Men.

By Leo D. Woedtke,

Director of Safety, Fred T. Ley & Co., Inc., Springfield, Mass.

It goes without saying that the usual methods of safety organization and campaign used in all other industries, especially factories, mills and permanent plants, are not applicable to construction work and general contracting, because of its continual changing of locations, variation in types and kind of work, fluctuation of number of employees, and the ever-shifting personnel of the men.

These conditions, peculiar only to construction work, have been aggravated even more since we entered the World's War, necessitating the use of many "green men," and suffering the loss of large numbers of skilled workers in various classes who have joined the colors or were attracted to other fields of war industries, munition factories, shipyards, etc.

Even so, with all these handicaps, safety engineering and accident prevention in construction work are not only possible, but simple and easy of application under proper methods.

On account of the many branches of construction work in general contracting and the variation in size and territory of general contractors as a whole, it would be indeed difficult to lay out any fixed set plans or methods of organization, and I must therefore be confined to general methods which have already proven satisfactory and of course would need to be changed as occasion required, to fit any particular firm or contractor.

To begin with, the head of the firm, the executive, the "Big Boss" must first of all be convinced that there is need, yes, dire need, of organization and campaign, and the statistics of his insurance company or his own records if he keeps them, should quickly arouse him to a sense of duty when he realizes the number of deaths, disabilities, missing members, blinded and crippled men, etc., due to his operations, the trained and skillful employees losing days, weeks and months, away from important work; his labor turnover data and the cost of breaking

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in new men; not finishing his jobs on time, sometimes paying a forfeit or losing a bonus; the extremely high and ever increasing rates for his liability insurance; and the realization that it is well worth while from every angle to spend time and money keeping good men, rather than hustling around at a loss to secure new labor, continually.

Once established, the Safety Director should study the particular line or lines of construction work his firm is engaged in and fortify himself with all available information, data, bulletins, instructions, safety guards, etc., applicable to the types and kinds of operations engaged in by his firm.

There is a fund of such data and information at the disposal of any one who is seriously interested.

The National Safety Council has hundreds of especially fine illustrated bulletins, designed especially for construction work which should be posted on the job bulletin boards. They also have issued several splendid "Safe Practices" pamphlets on goggles, engine guarding, engine stops, freight elevators, grinding wheels, couplings, pulleys, gears, scaffolds, etc., and also have a splendid library equipped with three librarians. They now also have a specialist in safety engineering and accident prevention on construction work, Mr. Sidney J. Williams, manager of their Accident Prevention Division, who has spent several years in and about general construction work.

Also, most all large insurance companies now maintain a efficient accident prevention department, and issue many valuable bulletins and furnish safety inspections, advice, co-operation, etc., without cost to their policy holders.

Then, also there are a number of publications devoted entirely to safety work, as for instance "Safety Engineering," issued monthly at a small subscription price. You can also secure without cost simply by application "The Monthly Review of the United States Bureau of Labor Statistics" by writing to Mr. Royal Meeker, Commissioner of the Bureau at Washington. Then also there are many local safety council branches of the National Safety Council throughout the country, and they should be joined if one

is in the locality or nearby, to get the benefit of their round table meetings, mutual experiences, etc.

The matter of mechanical safeguarding wherever possible is most important and a complete list of manufacturers of safety devices and appliances of all kinds can readily be secured from the National Safety Council.

The fact that construction work is well safeguarded mechanically, is a strong incentive and one of the best inducements, for the superintendent and foreman to safeguard his job, and to assist in the safety education of the rank and file of the men on the job, as it is then plain to them that the employer has done all that can be expected of him, at an expense of time and money and maintenance of a safety department to direct them, and naturally it is up to them from then on to secure results.

Construction superintendents, foremen and straw-bosses are of course pushing a job continually to get it done in the shortest possible time and at the least possible expense, and must be approached on safety work and accident prevention with clear and reasonable requests.

They must be educated to the safety idea, gradually and in a systematic and consistent manner without the use of sarcasm or destructive criticism.

The Safety Director should keep records of the accidents and statistics for each job separately by months, in order to know while the job is in progress, whether there is an increase or a decrease in the number of accidents, and also that he may keep the job superintendents and foremen advised monthly, for remember "The water which has gone over the dam is lost" and there is very little satisfaction in advising a job superintendent or foreman at the finish of a job that he had a bad record. You would not wait until a job was finished to advise a superintendent or foreman that the job lost money or cost more than it should for any unit or for the whole job, but you would know at least monthly, and possibly weekly, exactly how the cost of the job was running.

After considerable experimenting, I have found it advisable to classify only lost time accident into twelve main causes as follows:

1. Handling Materials.

2. Handling Tools.
3. Bad or Broken Tools.
4. Falling or Flying Objects.
5. Poor or Broken Staging, Scaffolds, and Runways.
6. Lack of Toe Boards, Rails, Screens.
7. Falls or Slipping.
8. Protruding Nails.
9. Ladders.
10. Ropes, Chains, Cables.
11. Machinery and Equipment.
12. Miscellaneous.

and to bunch all no lost time accidents under one group. Also to split the lost-time accidents into compensable and non-compensable groups, as well as to record the number of disabilities and fatalities separately.

This is easily done by giving each cause a number from 1 to 12 (quote Accident Classification Report) and marking on each accident report received the cause number and also whether or not the accident is a "lost time" case, whether compensable or not, and also noting if a disability or fatality is involved.

From then on, a clerk can compile this data monthly onto a printed form similar to the one I have quoted and from which you will note it is a simple matter to see at a glance how the accident frequency is running on any job, from month to month, both by causes and as a whole.

There are a number of sound ideas I have used to keep superintendents, foremen and the rank and file on the job continually interested in safety work and accident prevention, some of which I will mention.

Frequent safety letters with information, suggestions and friendly criticism.

Fresh bulletins for the job bulletin boards at least twice a month. These can be secured from the National Safety Council in any quantity desired. Also many insurance companies furnish occasional bulletins for their policy holders. We have also used several home-made bulletins showing reproductions from photographs of good and bad actual conditions on our own jobs, such as stagings, hammering tools, equipment, elevators, debris, etc., and have also made up blue printed bulletins occasionally by way of novelty and attraction.

Occasional special articles on some one thing at a time, such as "Chains, Ropes

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and Cables, Safe Loads, Fatigue, Spreads, Slings," etc., the "Dropsy or Butterfinger Habit," "Fire Prevention," "Am I My Brother's Keeper," etc.

Patriotic reference with regard to "industrial soldiers," "backing up the boys," "standing by Uncle Sam," etc.

Once in a great while a prize bulletin contest, open only to all employees of the firm, excluding executives and the Safety Department, offering small money prizes for the best suggestions for a safety bulletin illustrating a common hazard applying to the firm's operations or to general contracting.

Snappy safety slogans at the foot of all letters of any kind between the office and the job. (The National Safety Council issue a pamphlet listing hundreds of these slogans, and you can create many timely ones of your own.)

Safety slogans, cautions and instructions on the back of pay envelopes.

Danger tags with the firm's name thereon supplied in small tin half-containers fastened to the inside of tool boxes in the blacksmith shop, tool house, field office, etc., which are available for use on defective or condemned tools, machinery and equipment.

Accident statistics, both your own actual experience on any job or on all your jobs as a whole, and also striking general accident statistics which are published from time to time and some of which you heard me quote earlier.

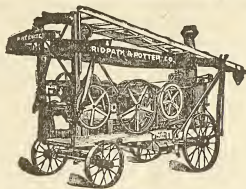
An occasional circular letter signed by the firm's executive asking for a report of what is being done in the way of safety work and accident prevention, the condition of bulletin boards, goggles, tools, equipment, first aid cabinets, etc.

Safety Calendars in cartoons, for use in field offices, tool houses, etc., which the National Safety Council issue at a very low cost each year. (You can have your firm's name printed on these calendars.)

Some firms also furnish the service of the Life Extension Institute at their expense to regular employees, including physical examination and personal reports. "KeepWell" leaflets, the Institute's monthly publication "How to Live," etc. Undoubtedly the sound and healthy employee meets with far less accidents as he is usually satisfied, efficient and contented. This service, of course, cannot be given to the floater or temporary employee.

It is also well to encourage and invite suggestions, items and constructive criticism, from any and all employees, as many splendid results and often good data or methods are thus secured.

Competition can also be created by



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quoting the records of various jobs on a percentage basis of accidents per hundred men and is a good occasional stimulant.

When a new critical departure or strict rule is necessary, it is often well to have a firm executive sign the circular letter used covering it.

A small pamphlet of safety instructions and rules can be drawn up and printed, to be given every new employee when he is hired, and also a different pamphlet on similar lines for the superintendents and foremen. These pamphlets might be called No. 1, and additional new or corrected pamphlets issued from time to time in the future, numbering them in order.

The compilation of a chart showing the accidents as a base, two or three years ago, and reduction or increase by yearly quarters thereafter, creates keen interest

when blue printed, distributed, and posted on the various jobs occasionally. Creating the first chart is of course the most difficult and the statistician or safety department of your insurance company will usually work it out for you or with you, after which time it is not difficult to add the results from quarter to quarter. Such a chart, as for instance, in my own case, is very instructive and interesting as it shows a fluctuating increase over a spread of three years from 13 to 80 per cent, sometimes dropping down, but usually gaining.

There are any number of ideas which can be worked out to secure and keep up the job's interest in safety work which develop as you go along. There is a big psychology about the "safety bug" in that the deeper you get into it the deeper you want to go.—*American Contractor.*

NECESSARY TO KEEP BUILDINGS EXPOSED TO THE ELEMENTS WELL PAINTED

By R. G. SHEELER.

THERE are probably but few people to-day who at one time or another have not taken a trip by automobile out through the country districts. If they have kept their eyes open, they have undoubtedly observed the comparatively large number of buildings, including houses, barns, sheds, etc., badly in need of a coat of paint. This condition seems general throughout the United States, although in some localities the lack of paint is evidences to a much greater extent than in others.

In years past paint has been considered largely rom the standpoint of beautification and therefore classed more or less as a luxury—"something that could be done without." Lumber and building materials as well as carpenter's wages were relatively low in cost. When repairs were necessary or when new buildings needed to be erected, the expense was nominal.

People were not educated to the real function of paint—protection and conservation. When after several years the house began to look the worse for wear it was painted to "make it look nice" rather than to protect it from decay. It is estimated that but 25 per cent. of the buildings in the United States are properly protected with paint. What an enormous economic loss, none the less real even though unnoticed, comes from the 75 per cent. needing painting—many of which have never come in contact with a paint brush. Professor King, of the Kansas State Agricultural College, has stated that the loss in his state through lack of paint is greater than that sustained through loss by fire. And this condition applies generally throughout our country. No far-sighted property owner would consider for a moment allowing his buildings to stand without protection from loss.

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by fire. Yet loss from fire may never occur. But loss from decay and deterioration is constant and sure—unless adequate protection is given by frequent applications of good paint.

Much progress has been made during the past few years in educating the general public to the necessity of frequent painting. A tremendous impetus has been given this movement indirectly by the wave of thrift and economy that has swept the country since the entrance of the United States into the world war. Lumber, building materials and workmen's wages have advanced so rapidly that the average individual cannot afford expensive repairs or the erection of new buildings. It is, therefore, doubly important that buildings now erected be conserved and made to stand as long as possible by keeping them well painted at all times. The trend of the advertising of most large paint manufacturers has been right along these lines, and it is bound to have its effect by increasing the use of paint from an economical standpoint rather than from the viewpoint of appearances only.

Good paint should always be considered as an investment rather than an expense. Instances have occurred without number where a coat of paint has added from 20 to 50 per cent. to the value of a property when put up for sale.

When buying paint, be sure it costs enough to be good. Don't be fooled by cheap paints. The paint making materials that have proven to be the most durable and practical have as much standard value as gold. Paint that costs less than standard will warrant, is either adulterated or made of second grade materials. You are just as likely to get good paint at so-called low and cheap prices as to get real \$5 gold pieces for 50 cents.

A peculiar thing about paint is that both poor and good paint look alike in the can, as well as similar in appearance immediately on application. Time only proves the worth of a good paint and the false economy of buying cheap paint. Poor paint soon loses its gloss, fades rapidly and either chalks or peels, allowing the elements to penetrate the paint coating and attack the lumber underneath. It thus fails in its most important function—protection. Repainting becomes necessary more frequently than it should, and the small added cost in the aggregate for a good paint is hardly worth thinking about, considering the longer service and better protection given by good paint. Then, too, when repainting becomes necessary, a good deal of preparatory work must be done in the way of scraping or

burning off the poor paint and making a proper formation for the new coat.

The biggest expense in painting is the cost of the labor in applying the paint. Good paint is easy to use and makes it possible to cover a greater amount of surface in a given time than can be done with a poor paint. Good paint "spreads" easily, works well under the brush, stays where it is put and makes painting a real pleasure.

While giving protection and beautification to the outside of the home, do not overlook the many uses of paint and varnish on the inside. Paint is largely taking the place of wall paper or calcimine for wall and ceiling use. And there are a good many reasons for this. The only advantage wall paper possesses is its convenience. It soils easily and cannot be cleaned readily and affords a lodging place for possible disease germs. Instances can be cited where after a period of years, a serious epidemic of disease broke out when repapering was being done, which could be traced directly to the presence of that disease in the house years before—allowing the germs to live underneath the paper until it was removed from the wall. Calcimines have little to recommend them for interior decoration. They brush off on clothing, cannot be washed when soiled and call for constant expense for refinishing. The only advantage they possess is the soft flat finish they produce, which is very artistic, when properly applied. The flat, washable wall finishes represent the latest development along these lines and are very satisfactory and desirable. They dry with a flat velvety surface, entirely without gloss, eliminating all eye-strain, which arises from glossy enamel finishes. These finishes can readily be washed when soiled, thus preserving their attractiveness and making the first cost practically the only expense for years.

Plain walls in neat combinations have much to recommend them to popular favor. Walls serve as a background to the room, just as a frame to a painting. They can either make or mar the effect desired. If the color scheme is selected with care, it is hard to improve on a painted wall and ceiling. It is sometime desirable to carry the ceiling color down to the side walls for a depth of 18 to 24 inches, and a neat stencil design placed where it joins the darker color for the lower wall, makes a very attractive effect. Rooms facing north and west should be given warm treatments—produced by tans, yellows, browns, reds, etc. These colors will add the necessary warmth that is lacking by such exposure. For south-

ern and eastern rooms, use grays, greens, blues, etc. These will neutralize the heat of the sun and make a very cool and inviting appearance.

The use of flat wall finishes is bound to increase, due to the high cost of attractive designs in wall papers and the prominence given these finishes in the advertising done by many of the paint manufacturers, thus educating the public to their value. If applied according to directions and under proper conditions, an interior so finished will be a constant source of satisfaction and pleasure.

In conjunction with finishes for walls and ceilings is the growing use of enamels, in which, ivory or gray for woodwork. These come in high gloss, dead flat and hand-rubbed finishes. They combine with the flat finished wall particularly well, creating a contrast and each offsetting the other. Certain of these enamels can be used outside as well as inside, and are very desirable for doorways and entrance decoration.

Paint manufacturers are performing a distinct service to the welfare of the country by their constant research and development of products for all kinds of decoration and protection. Paints and varnishes are doing a just share of the work of winning the war, and the property owner who makes free use of them in the conservation of his buildings is not only doing his duty but is a true patriot as well.

When ready to paint your property, it is well to obtain the services of a practical painter. The correct application of paint is second only to the quality of the paint itself. The best paint poorly applied will not always insure satisfaction, whereas a poor paint regardless of how well applied, is never satisfactory. You can safely depend upon a paint that is well advertised, and carries the trade mark or name of a responsible manufacturer on its label. Such an article may cost more than a less known indiscriminate brand, but the final economy in its use more than makes up for the few dollars more in the cost. A good paint covers more surface per gallon than a poor paint, so that fewer gallons are necessary for a given work. A properly made paint will give greater length of wear and better protection, and when repainting finally becomes necessary, the surface will be in better condition for the new coat, requiring less preparatory work to put it in shape.

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Surplus	-	-	8,317,502.26

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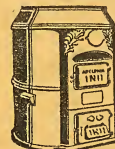
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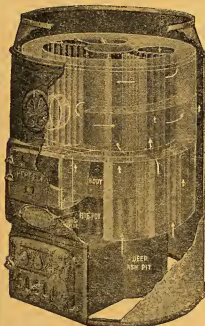
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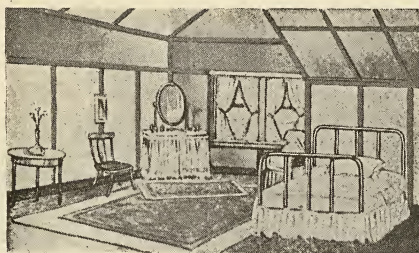
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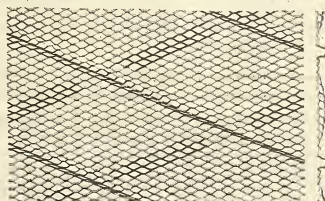
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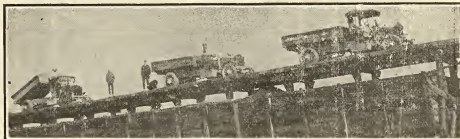
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural

Engineering and the Building Trades

VOLUME XXXIII

Number 49

PHILADELPHIA

December 4, 1918

BUILDERS' GUIDE

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As The Editor Sees It



THE new era in world history now before us sees the beginning of a marked advancement toward the elevation of the building industry to its highest possible plane. This condition will be brought about by the plans formulated at the convention of American contractors called for the purpose of organizing the "Associated General Contractors of America," held at the Hotel La Salle, Chicago, November 20 and 21.

Membership in the organization will be limited, so that only contractors who satisfy certain high standards may belong. The membership will include general contractors, individuals, firms or corporations, who have been engaged for at least two (2) years in general contracting prior to applying for membership in this Association, or who have established a reputation for skill, honesty and responsibility. They must also undertake work in its entirety, partly at least with their own constructing force. Organizations of general contractors, individuals, firms or corporations engaged in general contracting are also eligible to membership.

The general offices of the Association will be located in Chicago, with possible temporary headquarters in Washington for a short time.

D. A. Garber, of New York, opened the convention and introduced Andrew Lanquist, of Chicago, the permanent chairman of the convention. H. D. Hammond, of Philadelphia, was ap-

pointed secretary, and A. G. Field, H. B. Culbertson, and O. W. Berg, assistant secretaries.

The program of the convention follows:

WEDNESDAY, NOVEMBER 20.

Morning Session.

Convention called to order by Mr. D. A. Garber, New York.

Address of Welcome by Hon. Alfred Ericsson, Law Department, City of Chicago.

Explanation of call for convention by Mr. D. A. Garber, New York.

"What Organization Has Done for Chicago"—Mr. E. M. Craig, Secretary, Building Construction Employers Association, Chicago, Ill.

"What Organization Has Done for Detroit"—Mr. W. F. Austin, Ex-President, General Builders Association, Detroit, Mich.

"What Organization Has Done for Memphis"—Mr. D. M. Crawford, President, The General Contractors Association, Memphis, Tenn.

"What Organization Has Done for Atlanta"—Mr. Dan Carey, Secretary, Master Builders Association of Atlanta, Ga.

"What Organization Has Done for New York"—Mr. C. A. Crane, Secretary, The General Contractors Association, New York City.

"What Organization Has Done for the Central States"—Mr. C. P. Massard, Secretary-Treasurer, Central States Association of Building Trades, Des

Moines, Iowa. (A telegram was received from Mr. Massard expressing his regret at being unable to attend the convention, and assuring the delegates of the co-operation of both himself and the Central States Association of the Building Trades in the national movement.)

Afternoon Session.

"Prevention of Accidents"—Mr. S. J. Williams, of the National Safety Council.

"The Relations Between Engineers and Contractors"—Mr. J. F. O'Rourke, New York.

Report of Committee on Organization.

Address by Brig. Gen. R. C. Marshall, Jr., Chief of Construction Division, War Dept., U. S. A.

THURSDAY, NOVEMBER 21.

Morning Session.

Reports of Committees.

Adoption of Constitution.

Address by Col. William A. Starrett, Chairman, Committee on Emergency Construction, War Industries Board, U. S. A.

Afternoon Session.

Address by Mr. Harry A. Wheeler, President of the Chamber of Commerce of the United States of America.

Report of Nominating Committee.
Election of Officers and Executive Committee.

The following officers for the ensuing year were unanimously elected:

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President, D. A. Garber, of New York; first vice-president, W. A. Rogers, of Chicago; second vice-president, T. T. Flagler, of Atlanta; third vice-president, J. W. Cowper, of Buffalo; treasurer, C. F. Mullen, of Cleveland.

The following were elected members of the Board of Directors: For one year—N. F. Hoggson, of New York; F. J. MacIsaac, of New York; C. W. Gompertz, of San Francisco; George Watson, of Dallas; for two years—Richard Porter, of Portland, Ore.; A. P. Greensfelder, of St. Louis; Edward Haupt, of Chicago, Thomas Bentley, of Toledo; for three years—E. J. Thomas, of Memphis, L. C. Wason, of Boston; M. D. Smith, of Detroit; H. B. Hangar, of Richmond, Ky.

The platform adopted by the convention reads:

The Associated General Contractors of America, this day formed, hopes to be the means by which the impulse to progress noticeably here and there in the past may be crystallized into a movement which will lift one of the largest industries in the world to the highest plane.

In order to accomplish this object it will be necessary to maintain an efficient organization to study all branches of the industry and to disseminate both by literature and personnel counsel the best information obtained.

It is assumed that this can be best done under the following headings:

First, Ethics.

Second, Mutual Aid.

Third, Co-operation with other associations.

Fourth, Protection.

Fifth, Proper publicity.

A proper code of ethics will establish this industry in its rightful professional place. The standard of membership in this organization should be so high that it guarantees to the general public "skill, honesty and responsibility."

By mutual aid we mean the exchange of information concerning proper cost accounting, reliable estimating, fair and reasonable allowances for depreciation of plant, conditions covering rentals and terms as applied to equipment, etc.

By co-operation with other associations we aim to maintain contact with commercial, engineering, architectural or other organizations.

Protection is often needed and should be furnished individual members against conditions arising from unfair legislation, bidding conditions, competition, specifications, plans, contracts, supervision and unfair labor conditions.

Publicity by suitable mediums is essential for the well-being of the organization and should aim to reach the pub-

lic generally to create a sentiment of fairness and appreciation for the services rendered by the members of this organization.

The need for such an organization, what it can and will accomplish, was most ably set forth in Mr. Garber's address. Mr. Garber said:

As chairman of the organization committee it would seem fitting that at this time I should say a few words to you as to why you have been invited from your homes to meet here. Some of you have come from long distances and your presence here shows that you are expecting something of more than ordinary interest.

This convention has been called for the purpose of bringing together all local associations of general contractors and contractors from localities where there is no available organization, into one national association which is expected and intended to act as a parent organization for the benefit of us all.

It has been often said in the past that contractors could not be organized to assist each other, they were too selfish, that the competition was too keen, that enmities made because of that competition were too bitter, that no contractor had ever been known to do anything to assist or help his brother contractor but on the contrary was at all times awaiting the opportunity to help put him out of business, thereby hoping to relieve himself of that amount of competition; that all contractors were knockers and spent a large part of their time in knocking each other. It has also been said that contractors could not be fully organized because while many would be glad to see organizations formed and would be perfectly ready to accept benefits that might accrue from the work of a few men, the majority would not join and would thereby save themselves both responsibility and expense.

Now, your committee does not believe this to be true; in fact, it knows it to be untrue! Of course there are some business jealousies. This is to be expected in an industry as large as any and perhaps the largest in the country, but the jealousies and ill feelings of the past have been decreasing with the years and their effects are now infinitesimal in comparison with the general good feeling that prevails among the contracting fraternity everywhere.

This convention is called for business, serious business! And if there should be in the smallest degree any of the old feeling of rivalry, remember that the man seated beside you while he may be your business competitor is here for the high purpose of advancing your interest as well as his own. We are all one

family here, harmoniously working together for the general good.

The war is over as far as the fighting is concerned. The Allies and this country of ours are the victors. This, of course, is as it should be, and this is the end that we all expected and believed would come. But there is one thing that stands out clearly as probably the most definite contribution towards this happy result. It is unity of command which was so strongly advocated by President Wilson when America entered the war. Before that time the Belgians, under the French and the English were each doing their bit in their own way, but with very little idea of what the others were doing. The united armies of the Central Powers, under one leadership, were driving through Belgium and France and spreading the horrors of Hun warfare everywhere over those countries; but when Field Marshall Haig, in command of the British, King Albert in command of the Belgians, General Diaz in command of the Italians and our own John J. Pershing in command of the Americans, said to that magnificent Frenchman, Foch, "We will fight our armies for the general good in such way as you command," that is, in the vernacular of the contractor, they said to him, "You make the balls and we'll throw 'em,"—from that day the fate of the Hun was settled.

In the great Allied War Drive that is now going on for a hundred and seventy millions of dollars for the Y. M. C. A., the Y. W. C. A., the K. of C., the Jewish Welfare Board, the War Camp Community Service, the American Library Association and the Salvation Army, success is assured because of unity of action. The slogan of "Seven in name but one in aim," "Give all in one hat," is irresistible.

This great United States Government sets us the best of examples, being composed of forty-eight States, each a sovereign State with some control of affairs within its own territory but all subject to the higher authority of the Federal Government and acting together for the general good.

We represent one of the oldest lines of business, always in the lead, building homes, public utilities, railroads and all important works without which material progress would be impossible. The contractor is a large employer of labor, distributes large sums of money among manufacturers and dealers and affords a livelihood for millions of men and their families. In the war just closed he has performed Herculean tasks in periods of time thought to be impossible.

No business men rendered more strenuous and patriotic service to the Govern-

(Continued on Page 665.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Office and Exhibition Building (alts. and add.), 1318 Vine street. Architect, Paul J. Henon, Jr., Fuller Building, Philadelphia. Owners, Select Film Corp., 1335 Vine street, Philadelphia. Consists of interior and exterior alterations. Plans in progress. Too early for details.

Connecting Bridges and Platform (4), Orthodox-Margaret streets, Ruan-Church streets, Frankford Elevated, Philadelphia. Architects, Department of City Transit, Bourse Building, Philadelphia. Owners, City of Philadelphia, Department of City Transit, Wm. S. Twining, Director, Bourse Building, Philadelphia. Concrete and steel, cement work, structural steel, slag roof (electric lighting reserved). Owners taking bids, due December 23rd at noon. Plans and specifications can be secured at 748 Bourse Building.

Service Quarters and Mess Building, Pier D, Spec. 3598, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood and concrete, 1 story, 200x41 feet, ready roof, concrete foundations, cement and wood floors, electric lighting, kitchen equipment. Lowest bid submitted by Wark & Co., 1737 Filbert street, Philadelphia, \$43,500, 90 days.

Residences (13), West Philadelphia. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Calvin W. Rogers, Forty-ninth and Locust streets, Philadelphia. Brick, stone and stucco, 2 stories, 15x40 feet, garage in basement, stone foundations, cement and concrete work, slag roof, combination lighting, electric lighting. Plans about completed. Owner will be ready for sub-bids on December 6th.

Dwellings (15), Fernhill and Apsley streets, \$4,200 each. Architect, private plans. Owner, John N. McClatchey, Land Title Building, Philadelphia. Brick, 2 stories, 16x32 feet and 12x32 feet, slag roof, hot water heating, electric lighting, hardwood floors. Owner will build.

Congress Hall (alts.), Fifth and Chestnut streets, \$1,000. Architect, Joseph A. Roletter, City Hall, Philadelphia. Owners, City of Philadelphia, Bureau of City Property, City Hall. Venetian blinds. Owners taking bids, due December 9th. Hogg Const. Co., 1634 Sansom street, is figuring.

Office Building (add.), Thirty-second and Powelton avenue, \$1,500. Architect, private plans. Owners, Pennsylvania Railroad Co., Broad Street Station, Philadelphia. Brick, 1 story, 11x32 feet, slag roof. Owners will build.

League Island Park Buildings, Philadelphia. Architect, Ralph E. White, Pennsylvania Building, Philadelphia. Owners, City of Philadelphia, care of Department of Public Works, City Hall. Boat House, 2 stories, reinforced concrete and brick, 50x150 feet, tile roof; Band Stand, brick and concrete, 50x25

feet, tile roof, bronze columns; Comfort Buildings (3), Overlook, 25 feet diameter, 40 feet high, Indiana limestone. Plans completed. Owners will take bids in about two months. Plans in progress for additional buildings. Details undecided.

Residence and Garage, Germantown, Phila-

delphia. Architect, private plans. Owner's name withheld. Stone, 2½ stories, 25x34 feet, and 1 story, 18x22 feet, slate and tin roof, vapor heating, electric lighting, tile work, hardwood floors, cement floor. John M. Yardley, 1716 Sansom street, is taking sub-bids, due December 5th.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Bank Building (add.), Germantown avenue and Airdrie street, \$150,000. Architect, Philip Merz, Pennsylvania Building, Philadelphia. Owners, North Philadelphia Trust Co., on premises. Brick, 3 stories, 58 feet 9 inches and 55 feet 5 inchesx105 feet 3 inches, slag roof, steam heating, electric lighting, hollow tile, metal lath, structural steel. Contract awarded to A. R. Raff Const. Co., on August 15th, but work will now go ahead.

Store and Dwelling (alts. and add.), 1405 South Fifty-eighth street, \$2,600. Architect, private plans. Owners, Charles & Jacob Marcovitz, on premises. Brick, 1 story, 16x10 feet, slag roof, flush bulk and interior alterations. Contract awarded to N. Rosensky, 520 Dickinson street.

Garage (add.), northeast corner of Thompson and Clementine streets, \$2,000. Owners, E. Sutro & Sons Co., on premises. Brick, 1 story, 25x37 feet, slag roof, cement floor. Owners will build.

Box Factory (alts.), Mifflin and Commercial streets, \$1,500. Architect, private plans. Owners, T. B. Rice & Sons Co., on premises. Interior alterations, mill work, painting. Contract awarded to Smith-Hardien Co., 1606 Cherry street.

Garage (alts.) from Stable, 341-43 New Market street, \$3,000. Architect, private plans. Owner, Wm. F. Nickel, Jr., 339 New Market street, Philadelphia. Brick, 40x120 feet, repairs to roof, new front and north wall, 13 inches, brick. Contract awarded to E. C. Durell, 1713 North Twenty-fourth street.

Dwelling (alts.), 6730 North Thirteenth st., \$1,300. Architect, private plans. Owner, Raymond Graf, Camac and Chelton avenue. Porch enclosure, frame work, glazing, painting. Contract awarded to Frank K. Stahl, 2713 North Park avenue.

Garage, Forty-third and Woodland avenue. Architect, private plans. Owner, W. S. P. Shields, Witherspoon Building, Philadelphia. Brick, 1 story, 105½x71½ feet, slag roof, cement floors, steel sash. Contract awarded to D. Henwood, 1509 Wood street, Philadelphia.

Residence (alts. and add.), 385 East Gowen avenue, Philadelphia. Architect, Addison H.

Savery, Stephen Girard Building, Philadelphia. Owner, Herbert C. Morris, Chestnut Hill, Philadelphia. Mill work, plastering, glazing (enclosed porch), tin roof, electric lighting, hardwood floors and general interior and exterior alterations. Contract awarded to I. A. Dunkelberger, 71 East Herman street.

Restaurant (alts.), 24 South Fifth street, Philadelphia, \$3,000. Architect, private plans. Owners, Pennsylvania Trust Co., 517 Chestnut street, Philadelphia. General repairs and alterations. Contract awarded to John Duncan, 920 Walnut street, Philadelphia.

Shed, Buckins and Allen streets, Philadelphia, \$1,000. Architect, private plans. Owners, Henry Hitner & Son, Buckins and Richmond streets. Frame, 1 story, 39x42 feet, slag roof. Contract awarded to Harry Brocklehurst, 512 West Norris street.

Garages (2), 1002-04 North Sixty-fourth street, \$1,419. Architect, private plans. Owners, S. E. Marley & B. T. Mails, on premises. Brick, 1 story, 13x19 feet and 12x21 feet, slag roof. Contract awarded to George Adams, 5917 Chester avenue, Philadelphia.

Ice Cream Factory (add.), 3336-38 Market street, \$60,000. Architect, private plans. Owners, Supple-Wills-Jones Milk Co., Twenty-sixth and Jefferson streets. Brick, steel and reinforced concrete, 3 stories, 50x40 feet, and 1 story, 50x100 feet, slag roof, cement and mastic floors, hollow tile (steam heating reserved), electric lighting, fire doors, water-proofing. Contract awarded to George Kessler Const. Co., Drexel Building, Philadelphia.

Tank Storage, McKean and Dilworth sts., \$1,600. Architect, private plans. Owners, The Texas Co., Widener Building, Philadelphia. Piling and steel. Contract awarded to Latta & Roberts, Drexel Building, Philadelphia.

Telephone Exchange (alts.), southeast corner Fifty-seventh and Chestnut streets, \$3,225. Architect, private plans. Owners, Bell Telephone Co., Seventeenth and Arch streets, Philadelphia. New malleable partitions, glass transoms, brick work. Contract awarded to F. L. Hoover & Sons, 1023 Cherry street.

Factory (fire damage), 2120 Nicholas street,

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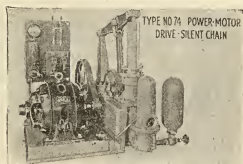
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HARRIS J. LATTA
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\$10,000. Architect, private plans. Owner, Geo.
D. Rush, on premises. Brick, general restora-

tion after fire. Contract awarded to E. H.
Sturtz, 1233 Wyoming street.

PENNSYLVANIA

Construction News

Hospital, West Chester, Pa., \$300,000. Architect, not selected. Donor, Pierre S. duPont, Wilmington, Del. Owners, Board of Trustees, West Chester Hospital, West Chester, Pa. Brick, steel and concrete. Sketches in progress. Details undecided.

Post Office, State College, Pa., \$60,000. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick and stone. Owners taking bids, due January 9th.

Post Office, Franklin, Pa., \$50,000. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick and stone. Owners taking bids, due January 17th.

Post Office, McKees Rocks, Pa., \$65,000. Architect,

James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick and stone. Owners taking bids, due January 14th.

Post Office, Sunbury, Pa., \$100,000. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick and stone. Owners taking bids, due January 20th.

Office Building (alts. and add.), Chester, Pa. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Bell Telephone Co. of Pennsylvania, Seventeenth and Arch streets, Philadelphia. Fireproofing, carpentry, plastering, painting, glazing, kitchen equipment, cement and wood floors, electric lighting, marble work. Architect has received bids.

NEW JERSEY

Construction News

Post Office, Woodbury, N. J., \$55,000. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Treasury Department, Washington, D. C. Brick and stone. Plans completed. Owners are ready for bids, due January 7th, 1919.

Post Office, Vineland, N. J., \$60,000. Architect, James A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Treasury Department, Wash-

ington, D. C. Brick and concrete. Owners taking bids, due January 10th.

Coal and Oil Pier, Spec. 3560, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Timber construction, 488x24 feet, sheet iron coal chutes, plan floors, railroad tracks. Lowest bid submitted by J. H. Terry & Co., 969 Drexel Building, Philadelphia, \$46,100, 90 days.

Proposals

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TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., November 25, 1918. Sealed proposals will be opened at this office at 3 p. m. January 3, 1919, for the construction of the United States Post Offices at Park City, Utah, Newburyport, Massachusetts, and Mount Carmel, Illinois; also at 3 p. m. on January 6, 1919, for the construction of the Post Offices at Bakersfield, California, Lancaster, South Carolina, and Caribou, Maine; also, at 3 p. m. on January 7, 1919, for the construction of the Post Offices at Woodbury, New Jersey, and Fremont, Ohio, and for the extension, remodeling, etc., of the Post Office and Court House at Alexandria, Louisiana; also, at 3 p. m., on January 8, 1919, for the construction of the Post Offices at Prescott, Arkansas, Cody, Wyoming, and Waterloo, New York; also at 3 p. m., on January 9, 1919, for the construction of the Post Offices at Orange, Texas, and State College, Pennsylvania, and the Post Office and Court House at Durango, Colorado; also, at 3 p. m., on January 10, 1919, for the construction of the Post Offices at Front Royal, Virginia, and Vineland, New Jersey; also, at 3 p. m., on January 13, 1919, for the construction of the Post Office at West Point, Georgia, the Post Office and Custom House at Fort Fairfield, Maine, and the Post Office and Court House at Globe, Arizona also, at 3 p. m., on January 14, 1919, for the construction of the Post Offices at

SCALES AND VALVES

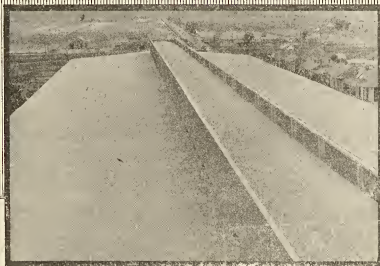
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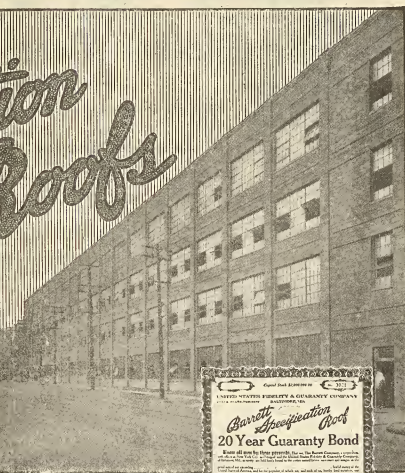
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Barrett Specification Roofs



Barrett Specification Roof on Plant No. 3 of The Studebaker Corporation, at Detroit, Mich. Roofers: The Howie Company, Detroit, Mich.

Photo at left: Barrett 20-Year Specification Roof on Acid Plant of Siefert & Company, Harvey, La. Roofers: Kracke & Flanders Company, New Orleans, La. General Contractors: Huggar Bros., Montgomery, Ala.



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Now we go a step further by sending our Inspectors to check up on the construction, and if they find that The Barrett Specification has been properly complied with, we will, without charge, issue a 20-Year Guaranty Bond *exempting* the owner from all further expense for repairs or up-keep on that roof for twenty years.

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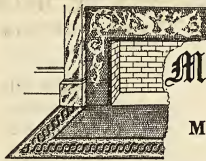
Thus, in spite of the fact that we do not build roofs ourselves, we are put in a position where we can guarantee the delivery of the long years of service which these roofs are capable of giving.

A copy of The Barrett 20-Year Specification, with roofing diagrams, sent free on request.

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or Rent

Southbridge, Massachusetts, Cherokee, Iowa, and McKees Rocks, Pennsylvania; also, at 3 p. m., on January 15, 1919, for the construction of the Post Offices at Long Island City, New York, Kenton, Ohio, and Bellefourche, South Dakota; also, at 3 p. m., on January 16, 1919, for the construction of the Post Offices at Winchester, Massachusetts, Eldorado, Kansas, and Shawnee, Oklahoma; also, at 3 p. m., on January 17, 1919, for the construction of the Post Offices at Franklin, Pennsylv-

ania, Cohoes, New York, and Buffalo, Wyoming; also, at 3 p. m., on January 20, 1919, for the construction of the Post Offices at Harrisonville, Missouri; Owego, New York, Decatur, Alabama, and Sunbury, Pennsylvania. Drawings and specifications for the several buildings may be obtained from the Custodian of the site in each city, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dwelling, 6730 North Thirteenth street, \$1,300. Raymond Graff (O), Camae and Chelton avenue. Frank K. Stahl (C), 2713 North Park avenue.

Hotel and Stable, 354 North Second street, \$1,000. Mrs. Jordan (O), 1124 West Lehigh avenue. H. W. Trump Co. (C), Land Title Building. Repairs to brick work.

Storage Additions, 5535 North Fifth street, \$4,400. Murphy. Gros. (O), on premises. F. & E. Aibel (C), 2503 Germantown avenue. Iron on iron, 1 story, 8x23 feet.

Store and Dwelling, 2034 Ridge avenue, \$500. Sarah Schwartzberg (O), on premises. Jake Greenspun (C), 551 North Sixth street. Brick, 1 story, 14x10 feet.

Store and Dwelling, 2224 Ridge avenue, \$550. Wm. Becker (O), 2224 Ridge avenue. Nathan Lehman (C), 920 Wolf street. Interior alterations, making store larger.

Garage, 4667 North Mascher street, \$600. Wm. Childs (O), on premises. Brick, 1 story, 20x20 feet, slag roof.

Storage Building, Richmond street and Frankford avenue, \$2,000. G. & H. Barnett (O), on premises. M. Ward Eashy (C), 1420 Chestnut street. Brick, 1 story, 20x35 feet, slag roof, cement floors, electric lighting.

Rooming House, 3804 Chestnut street, \$1,000. James F. Conway (O), on premises. A. J. Smith (C), 1221 South Twenty-sixth street. Fraternity House, 3637 Locust street, \$930. St. Anthony Hall (O), on premises. Low pressure steam heating.

Garage, northeast corner Thompson and Clementine streets, \$2,000. E. Sutro & Sons Co. (O and C), on premises. Brick, 1 story, 75x36 feet, slag roof.

Store and Dwelling, 1405 South Fifty-eighth street. Charles & Jacob Marcovitz (O), on premises. Nathan Rosensky (C), 520 Dickinson street. Brick, 1 story, 16x10 feet, slag roof, flush bulk.

Bank Building, Germantown avenue and Aldridge street, \$150,000. North Philadelphia Trust Co. (O), on premises. A. R. Raff Cont. Co. (C), 1635 Thompson street. Brick, 3 stories, 58 feet and 55 feet x 105 feet, slag roof, steam heating, structural steel.

Box Factory (alts.), Mifflin street and Commercial avenue, \$1,500. T. B. Rice & Sons Co. (O), on premises. Smith-Hardican Co. (C), 1606 Cherry street. Mill work, painting, interior alterations.

Store and Dwelling, 708 South street, \$1,500. Newman Beard (O), 608 South Seventh

ARTESIAN WELLS DRILLED



Test Borings
Soundings

JOHN B. RULON
1355 Colwyn Street
Philadelphia, Pa.

street. David Goldstein (C). Repairs, flush bulk, rebuild front third story.

Dwelling, 451 Ritner street, \$800. H. B. Hopperman (C), 611 South Sixth street. Hot water heating.

Garage (alts.), 2506-08 Edgemont street, \$900. James F. Bay (O), 2501 Edgemont st. Louis Cohn (C), 417 Christian street. Remove frame walls and replace with 13-inch brick walls, 50 feet long, 12 feet high.

Dwelling (add.), 1263 Moore street, \$700. Tony Artuse (O), 1259 Moore street. Frank Colonna (C), 1113 Mifflin street. Brick, 2 stories, 12x18 feet, slag roof.

Restaurant, 24 South Fifth street, \$3,000. Pennsylvania Trust Co. (O), 517 Chestnut st. John Duncan (C), 920 Walnut street. General repairs.

Garage, 1004 N. Sixty-fourth street, \$547. B. T. Mills (O), 1004 North Sixty-fourth st.

George Adams (C), 5917 Chester avenue. Brick, 1 story, 12x21 feet, slag roof.

Garage, 14 East Oxford street, \$100. Mrs. Tillie Long (O), 5421 North Fifth street. John H. Cloak (C), 5421 North Fifth street. Brick, 1 story, 10x16½ feet, slag roof, cement floor, electric lighting.

Changing Stable to Garage, 14 East Oxford street, \$1,200. Mrs. Tillie Long (O), 5421 N. Fifth street. John H. Cloak (C), 5421 North Fifth street. Brick, 1 story, 34½x16½ feet, slag roof.

Garage, 1002 North Sixty-fourth street, \$872. S. E. Marley (O), 1002 North Sixty-fourth street. George Adams (C), 5917 Chester avenue. Brick, 1 story, 18x19 feet, slag roof, cement floors, electric lighting.

Shed, Buckius and Allen streets, \$1,000. Henry Hittner & Son (O), on premises. Harry Brocklehurst (C), 512 Norris street. Frame, 1 story, 39x42 feet, slag roof.

Mission (int. alts.), 2825 Frankford avenue, \$500. Winfield H. Strook (O and C), 2139 East Cambria street.

Workshop, Thirty-third and Gray's Ferry Road, \$2,000. Philadelphia Steel and Iron Co. (O), on premises. Iron, 1 story, 41x90 feet.

Store and Dwelling (alts.), 4521 Frankford avenue, \$300. Lewis Miller (O), 1647 Howarth street. J. D. Fotheringham (C), Arrott and Castor road.

Garage (alts.), 341-43 Newmarket street, \$3,000. Wm. E. Nickel, Jr. (O), 339 Newmarket street. E. C. Durell (C), 1713 North Twenty-fourth street. Brick, 40x120 feet, roof repairs, new front and north wall, brick, 13 inches.

It is surely an injustice to your workmen as well as a source of loss to yourself to supply poor tools in your shop equipment. No man can do anything approaching good work with tools that take the edge off enthusiasm. In shop management, as in most things, details are the whole cloth. Tools are like men. They do good work or they do not, according to the character which they possess. Character in tools is a matter of good materials, expert making and correct design.

Buy pure lime, 99% pure, no core, no grit. DAVID FRANCE CO.,
Tasker Street Wharf, Delaware River, Phila. Both phones.

A. B. SEE ELECTRIC ELEVATOR CO.

507-8 Colonial Trust Building, Philadelphia

**ELECTRIC ELEVATORS OF HIGHEST
EFFICIENCY FOR EVERY SERVICE.**

LET US SHOW YOU.

Both Phones

AS THE EDITOR SEES IT.

(Continued from Page 660.)

ment than contractors. His sons are in the Army, his office force is in the engineering corps as officers, his subscriptions to the recent war drive and to the Liberty Loans were often in excess of his means.

Now the word contractor is supposed to embrace a large number of people. Anyone who has an agreement in writing is called a contractor. During the Spanish-American War when the so-called embalmed beef was sold to the Government for use of the troops, there was a great outcry against contractors. During this war the rain-coat manufacturers who produced inferior goods were called contractors.

I am thankful to say, however, that the men who are seated here this morning are not that kind of contractors and no suspicion has been directed against the builder, although he has performed many millions of dollars' worth of work.

This association should be formed along similar lines, having for one of its organizations, each to have entire control of its own affairs, to solve its own local problems and to be independent in every way within its own territory, but looking to the national association for help and assistance and co-operation when necessary and in all matters of a national character.

Nearly every interest with which we deal is organized nationally. At the conference called by the National Chamber of Commerce for the formation of the National Federation of Building Industries, there were sixty-four national organizations, all of which we are constantly brought into contact with and with whom we have business dealings.

Now, should the contractors remain unorganized alone and subject to the many evils that we all know so well? Or will they combine and protect themselves and help others? The idea of organizing nationally into a national body was first advanced at Atlantic City in July, when at an informal meeting of some thirty-odd contractors the organization committee was appointed and I was on it with the chairmanship. The committee met in New York, September 23rd, and decided upon this convention

in Chicago and you have been called together for the purpose of perfecting the organization.

Because of their very large acquaintance among contractors throughout the country, the Committee realizes and knows that once the association is formed it will be carried on with that complete success which characterizes the efforts of the American contractor.

At this time the hostilities have so happily ceased and the reconstruction period is beginning, the contractor can again render the Government most important services and we are all ready to do so. As a member of this association, he will have a better standing than in the past for many reasons. The objects and principles for which we stand and which we are here to establish, will bring about increased confidence between the contractor, the owner and the material men and, last but not least, between the contractor and his employees.

In the past there has been the false idea that their interests at all times clashed, which idea has so often resulted in loss to both. The truth is that in a majority of cases their interests flow in parallel channels. The problems of labor should be met deliberately and calmly and not in the heat of passion. An agreement should be made between employer and employees based upon equity and fair dealings.

I have a great and abiding faith that all this and much more can be accomplished by our national organization and this organization will be in a very short time one of the strongest and most successful national organizations, made so by your energy and the reputation we will command as a body of representative men, standing for the square deal and the knowledge of our determination to accept no other.

Emphasizing the benefits resulting from an organization such as the "Associated General Contractors of America, W. F. Austin, ex-President, General Builders' Association, of Detroit, said:

"On the whole, the General Builders' Association of Detroit can be said to have stabilized the building industry in Detroit. In dollars and cents the association has saved for its members dollar for dollar all that they have paid into it by group insurance plan and arrangements for benevolent or other donations, and in other savings. The activities of this association, in fact, are limited only by its local character and its comparatively small sphere of influence. In other words, the activities of our association are limited by the lack of a national association.

The General Builders' Association of Detroit, gentlemen, is an orphan. The General Builders' Association of Detroit wants a parent organization. This association from Detroit is here 100 per cent. strong. Its members support this movement unanimously because they know by experience the benefits, just as they know by experience the limitations, of local organizations, which are limitations only because of the absence of a parent or national organization with which to become affiliated.

Local issues may become national issues tomorrow. Separate individual effort is no longer sufficient or efficient. Get together, form local associations. It pays. You will enjoy it and be benefited by it. Let us raise the standard and the standing of the contracting business so that it may take its proper place in the business world."

D. M. Crawford, President of the General Contractors Association of Memphis, showed how labor problems,

**Washed Bar Sand and Gravel will take less cement on concrete work. We know how,
DAVID FRANCE CO., Tasker Street Wharf, Delaware River, Philadelphia,**

HEATING

BOWERS BROS. & CO.

 1629 Ludlow Street
 Philadelphia, Pa.

standard contract forms, professional standards, unfair competition overhead were issues best met by co-operative effort.

C. A. Crane, secretary of the General Contractors Association of New York

City, expressed the firm belief that an association of this kind would promote better legislation, that legal hazards and unnecessary restriction on construction could be removed, that costs to both contractor and the public could be reduced.

all have to be taken in consideration in order that the final result may be harmonious and artistic.

Many buildings have lost their individuality and attractiveness by the injudicious use and lack of knowledge of the materials used on the grounds.

It is a very common sight to see the base of houses and verandas planted with evergreens that eventually grow to a height of thirty to forty feet, their ultimate growth, and planted three to four feet apart.

The landscape architect having no plants to sell himself, uses only such stock as will produce the best results obtainable in carrying out his plans. His knowledge of botany, soil and climatic conditions, together with his artistic appreciation of natural conditions all tend to make his services valuable to the home builder.

Not only this; but the material advantages of saving in cost in the intelligent handling of soil, drainage, and road building should appeal to the intelligent man.

The compensation for services charged for such information and plans to carry out this work is very apt to be offset by the saving in the final cost over that of what it would be if placed in inexperienced hands, to say nothing of the satisfaction of having something that has the stamp of artistic merit.

By careful manipulation of Nature's material at the disposition of the landscape architect, small areas may be made to appear large. Vistas can be opened, originally where there were none. Masses of living green covered with fragrant flowers in the summer and loaded with brilliant berries in the winter all go to make up the complete picture, pleasing to the eye with its intermingling of light and shade and restful in its composition.—*Realty*.

The only road to advancement is to do your work so well that you are always ahead of the demands of your position. Our employers do not decide whether we shall stay where we are or go on and up; we decide that matter ourselves. Success or failure is not chosen for us; we choose them for ourselves.—H. W. Mabie.

FITTING THE LAND TO YOUR HOUSE

BY WILLARD W. GAY, *Landscape Architect.*

The average man who contemplates building a house for himself, feels that he has certain definite ideas as to what he wants in the way of buildings—and can probably put in some concrete form his ideas, at least to a point where he can give the architect the data necessary to formulate plans by which contracts, estimates, etc., can be obtained.

He is also more or less familiar with building materials or, if not, by the assistance of the architect's plans, cuts and descriptions, he has formed in his mind's eye, a tangible object which he is able to judge whether he likes or dislikes it.

The living requirements of his family and his own personal tastes, all enter into the building, and he has created for himself with the assistance of the architect a building that is habitable as well as artistic.

Having settled on a suitable design for the house, the next question that arises is its location on the lot. The supposition being that he has purchased a lot on some development tract of land where all matters pertaining to environment and restrictions have been looked after.

Where lots are small and there are certain building restrictions, he has but little choice regarding this matter, but where the lots average one acre or more, careful thought should be given to this subject, as there are several important points that should be taken into consideration, and it is at this stage that the owner would be wise to consult with the landscape architect, not but that the building architect would be able to locate the house, but that the various phases of the final layout of the grounds might not be taken into consideration, such as paths, roads, gardens, screens,

etc., all of which bear a distinct relation to the whole, and as units must be taken in account.

Locating the house a few feet this way or that, may make a decided difference in what may be wanted to be done afterward, and when considered at the right time would be the means of a great saving in cost. Not only this, but what might seem to be an impossible location to the owner and architect would prove to be made possible by treatment of the landscape architect.

These essential matters having been disposed of, he now comes to a point where the decoration of the grounds occupies his attention, and it is here that the average man feels at a loss to know just what to do. He realizes, or should, that the setting of the house has everything to do with its outward appearance as well as commanding he admiration of his friends and neighbors. But just how this result can be accomplished he is at sea, for the average business man never heard of a landscape architect. He knows about nurseries where shrubs and trees can be bought and that he can with the assistance of the nursery man, select certain plants and place them in different parts of the grounds, where in the due course of time they will grow up, and to his mind create effects that may be characterized as pretty, but so far as an artistic and well balanced design is concerned, that is lacking.

As the owner is dependent on the architect for the artistic merit of his house, so should he seek to secure from the landscape architect, like effects on his grounds.

The knowledge of the materials to be used and ultimate form and growth

We have pebbles all sizes. Cost less than what you are using. **DAVID FRANCE CO.**, Tasker Street Wharf, Delaware River, Philadelphia.

The man with an order to place doesn't hunt you up in the city directory these days. He hasn't the time. If he can't find you in your trade magazine he can and does find somebody else, and that somebody else books the order.

The man who doesn't advertise, these days, is forgotten. The world is too busy to look up dead ones.



We Drill Wells and Get Water Test Borings and Soundings

LET US SUBMIT PRICES

RIDPATH & POTTER CO

487 Bourse Building
Philadelphia, Penna.

BY BUILDING NOW, THE PROPERTY OWNER WILL HELP CREATE ERA OF PROSPERITY

By NOBLE FOSTER HOGGSON.

Building,—construction work,—has, almost overnight, leaped from a non-essential classification to the greatest of all activities. In the initial order of the War Industries Board lifting the ban on prohibited businesses and industries, construction work was first on the list of releases, and within a week all restrictions on private or public construction were removed.

That really was not surprising. Every student of the problems of reconstruction has predicted in his calculations that building would be the supreme activity of early peace times.

Every indication points to these predictions coming true. There is serious economic need for new buildings, mainly because the building industry has been depressed for years. There is an acute paucity of almost every kind of structure, ranging from small houses for workmen, increased peace-time factory and plant extensions, to banks, large hotels and office-buildings. Soon there will be an unprecedented rush of building. Architects will be given commissions that will flood their offices,—so long parched and dry,—and orders for plans will be numbered in the order of their receipt and taken care of in their respective turns. The manufacturers of building material will be utterly unable to fill the avalanche of orders, not alone for the construction work to be done in this country, but for the re-building of France and Belgium. Almost every ship that sails for Europe will carry a full cargo of building material, supplies and equipment.

It is idle to talk of awaiting the report of this commission or that commission to proceed with the work of reconstruction. Only the indolent-minded in-

dividual is content to sit back and wait for some body of men to do his thinking for him. The problem of reconstruction is an individual problem.

The man who has been intending to erect a new building or alter or remodel an existing structure, but who has deferred his work, either because of the ban on construction or for certain other reasons, has exceptional opportunity for doing something definite in the matter now.

Many of the best authorities argue that the prices on building materials are not likely to make any decided change in the near future,—perhaps not for some years. On the other hand, it is possible, considering the high rentals prevailing, that a building erected now at present prices of material and labor will produce a greater return to the owner than a building erected two years hence.

From many points of view, economic as well as social, it seems propitious to have plans for buildings made now, so that every individual will at this time put into actual practice a bit of work that is going to be a step towards the great work to be done. Such action will help to stabilize industry in this period immediately preceding and which will follow the formal declaration of peace.

Let us build,—let us create,—let us stage the great drama of the city streets on every corner where a new building should rise on a vacant lot. Let us begin now our plans for reconstruction; our plans to provide employment for the returning warrior and for the loyal warriors who remained behind and helped make possible the great success of his brother in arms across the seas.

HOW TO COMPUTE LABOR TURNOVER.

The following standard definition of labor turnover and standard method of computing the percentage of such turnover was adopted by the national conference of employment managers at Rochester, N. Y.

Labor turnover for any period consists of the number of separations from service during that period. Separations include all quits, discharges, and lay-offs for any reason whatever.

The percentage of labor turnover for any period considered is the ratio of the total number of separations during the period to the average number of employees on the force report during that period. The force report gives the number of men actually working each day as shown by attendance records.

It is recommended that the percentage turnover be computed for each week. All turnover percentages for a week or for any other period should always be reduced to a yearly basis and be reported in terms of percentage per annum.

To compute the percentage of labor turnover for any period, find the total separations for the period considered and divide by the average of the number actually working each day throughout the period. Then multiply by the proper factor to reduce to a yearly basis:

Example:

Method of computing percentage of labor turnover for one week—

Total number of separations during week, 300.

Daily force reports (workers actually on the job):

Monday	1,020
Tuesday	1,065
Wednesday	1,070
Thursday	1,035
Friday	1,040
Saturday	990

Average for week 1,037

Percentage of labor turnover—

300

— x 52 = 1,504 per cent.

1,037

Many a man would do a better job if he didn't know about putty.—Ex.

Our specialty is Portland Cement that will stick and pass the City Department. **DAVID FRANCE CO.,**
Tasker Street Wharf, Delaware River, Philadelphia.

RUSH BUILDING IN MINNESOTA.

One thousand volunteers from Duluth put up 200 houses and barns in two days in the district that had been devastated by forest fires in Minnesota. One thousand men responded to the call on November 2 and 3. At least as many more buildings must be erected before cold weather sets in.

Up to the night of November 2 reconstruction workers had received applications for and had shipped to sub-stations and delivered in St. Louis county, 1,049 units of lumber for both barns and homes. Of the total number necessary 443 houses and 606 barns can be erected with the present supply of lumber it is estimated. Out of the remaining 800 buildings which will have to be built, the settlers are expected to build half of them.

The Minneapolis fire relief fund, which was officially closed recently, had reached the total of \$158,949.29, according to Fred B. Snyder, chairman. Donations continue to pour in and it is estimated that the final receipts will reach \$165,000.

PREPARE TO BID ON HANGARS.

Contractors should be prepared hereafter to offer bids on hangars, just as they would on ordinary garages. On November 4 ground was broken at the Ashburn flying field in Chicago for the hangars to serve as a receiving station for the Chicago-New York aerial mail, and to house the airplanes to be used in the service.

With the return of the aerial forces from Europe the airplane will come into greatly increased use in both public and private service.

All live men are advertisers, and the only man who should not advertise is the man who has nothing to offer to the world in the way of human service, and such a man is a dead one, whether he knows it or not. Advertising is a legitimate and ethical proposition. Life is too short for you to hide yourself away, mantled in your modesty, and let the world hunt you out. Even the dead are advertisers, for on visiting a beautiful cemetery the other day, I noticed that on nearly every marble slab was given a list of the virtues, talents and beautiful qualities which the dead man was supposed to have carried in stock. This is what you call non-productive advertising, or advertising from an emotional standpoint.—Elbert Hubbard.

People who want to buy things do not catch the seller, chloroform him and cram the orders into his pocket.

Advertising is the proper education of the public as to where the thing can be found, and therefore it is a necessity.

We are parts and particles of each other, but a little of the kindly glue of human brotherhood is needed to fasten us together. The policeman who keeps the crossing clear, and at the same time informs us as to the location of the post office and the First National Bank, no doubt is, in one sense, an economic waste. On the other hand, he is an economic necessity. He is a necessary middleman.

He relieves the congestion of traffic and granting the hypothesis that he does not misdirect us as to the location of the post office, he speeds us on our way.

The other day a prominent local architect called up to inquire regarding a concern that has not advertised with us for two years. "I saw their ad. some years ago in the Guide," said the architect, "and am unable to recall just where they are located." We gave him the address and learned subsequently that as a result the firm bagged a big order. How many similar orders, from architects who wouldn't take the trouble to look them up, that same concern has missed in the course of the past two years it would interest us to know.

Just remember this: Give out courtesy, kindness, patience and good-will, and you'll get them all back with compound interest. The men who deserve to rank in Class A do not chew the lint and fuss about the small misfits of life. To take what comes and forget the rest is wisdom. Let Braggo give the janitor the call, and the Hall Boys have it out with the Ashbox Inspector—you can't afford to soil your soul with small scraps. Fight on a big scale, or not at all. The folks who have trouble with ushers are always looking for trouble—and find it. Smile, old boy, smile!

There is not a business one can think of, which is not full of little temples where one can curse or pray. Every business that one knows has its host of light in it, fighting against its host of darkness; one set of men conducting the business as if they and the public were engaged in a sort of mutual enthusiasm and daily service, with permanent success as the goal; and another set of men whose success is ruining the business to which they belong, and the public besides—and themselves.

DUCK SHOOTING and COMMON SENSE

When you buy space you buy it with the expectation of getting a reasonable return on your investment. Sure you do. Now where do you stand the best chance of getting that return—in the daily newspaper, whose circulation is confined largely to people with no interest in your product, or in the trade paper, every copy of which goes to a reader directly interested and likely at any minute to need your goods?

If your hobby is large circulation, you will spend your money in the daily—but before you take this step suppose you pause long enough to figure just what percentage of the immense circulation, for which you will pay a fancy rate, is going to go where there is so much as an off-chance of it doing you any real good. FROM THE ANGLE OF THE MAN WHO HAS BUILDING MATERIAL TO SELL, FULLY NINETY PER CENT. OF THE SWOLLEN CIRCULATION OF THE DAILY NEWSPAPER REPRESENTS WASTED AMMUNITION. It is going to readers who are not interested in building material, and are not likely even in a remote sense ever to build or have building done.

IF YOU WANTED TO SHOOT DUCKS YOU WOULD NOT FIRE PROMISCUOUSLY INTO THE AIR, HOPING THAT BY SHEER LUCK SOME MISGUIDED MALLARD MIGHT ACCIDENTALLY WANDER INTO RANGE, OF COURSE YOU WOULDN'T! YOU'D GO WHERE YOU KNEW DUCKS TO BE, and, sighting a covey of 'em, you'd bang away with both barrels. So it is with advertising.

In the daily you stand an off-chance in a thousand of accidentally hitting the eye of some fellow with an interest in your line. In the trade papers, such as the Guide, you bang into a colony of readers who are interested in building above all other human activities.

The moral is—when you go duck shooting do your shooting where you know the ducks to be!

WHEN YOU WANT TO REACH THE ARCHITECT, THE BUILDER, THE BUILDING OWNER, THE INVESTOR, THE SUB-BIDDER, IN EVERY BRANCH OF THE CONSTRUCTION FIELD, THERE IS BUT ONE PRESERVE IN WHICH TO GUN:

THE BUILDERS' GUIDE
Pennsylvania's Oldest and Only
Architectural and Building Publication

Perry Building, Philadelphia.

Reference Directory for Architects, Builders and Owners

Artesian Wells.

Artesian Well Drilling Co.,
Real Estate Trust Bldg., Phila.
Bidpath & Potter Co.,.....Bourse Bldg., Phila.
John B. Rulon.,.....1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

Chas. H. Robbins.,.....125 S. 11th st., Phila.
Warren-Knight Co.,.....136 N. 12th st., Phila.
F. Weber & Co.,.....1125 Chestnut st., Phila.

Blackboards.

William Moore Co.,.....1506 Sansom st., Phila.

Blue Prints.

Chas. H. Robbins.,.....125 S. 11th st., Phila.
F. Weber & Co.,.....1125 Chestnut st., Phila.

Blue Print Paper.

Chas. H. Robbins.,.....125 S. 11th st., Phila.
F. Weber & Co.,.....1125 Chestnut st., Phila.

Brick (Face, Etc.).

O. W. Ketcham.,.....Builders' Exchange, Phila.
Builders.

Mitchell Bros.,.....2125 Race st., Phila.
Pomeroy Const. Co.,.....1609 Ranstead st., Phila.

Builders' Supplies.

P. H. Fairlamb Co.,.....115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.

Cement.

P. H. Fairlamb Co.,.....115 S. 30th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.
Lehigh Portland Cement Co.,
Finance Bldg., Phila.

Columns (Metal).

Pearce Fireproof Co.,.....1345 Arch st., Phila.
Composition Flooring.

The Barrett Company,
New York and Philadelphia.
Philadelphia Mineral Flooring Co.,
5332 Summer st., Phila.
Woodoleum Manufacturing Co.,
133 Arch st., Phila.

Dampproofing.

The Barrett Co.,.....New York City and Phila.

Drawing Materials.

Charles H. Robbins.,.....125 S. 11th st., Phila.
F. Weber & Co.,.....1125 Chestnut st., Phila.
Warren-Knight Co.,.....136 N. 12th st., Phila.

Electrical Construction.

Baird-Osterhout Construction Co.,
1620 Chancellor st., Phila.

Elevators.

A. B. See Electric Elevator Co.,
Colonial Trust Bldg., Phila.

Engineers' Supplies.

Charles H. Robbins.,.....125 S. 11th st., Phila.
Warren-Knight Co.,.....136 N. 12th st., Phila.
F. Weber & Co.,.....1125 Chestnut st., Phila.

Fences.

Anchor Post Iron Works,
Real Estate Trust Bldg., Phila.

Fire Doors.

Merchant & Evans Co.,
2035 Washington ave., Phila.

Fireproofing.

Consolidated Expanded Metal Co.,
2200 Arch st., Phila.
General Fireproofing Co.,
832 Arch st., Phila.
Henry S. Harris.,.....Land Title Bldg., Phila.
Metal Lath Specialty Co.,
2610 W. Huntingdon st., Phila.

Pearce Fireproof Co.,.....1345 Arch st., Phila.
Truscon Steel Co.,.....Commonwealth Bldg., Phila.

Floor Plates.

Alan Wood Iron and Steel Co.,
Widener Bldg., Phila.

Furnaces and Ranges.

Borden Stove Co.,.....1311-13 Arch st., Phila.
Henry M. Miller.,.....46-48-50 N. 2d st., Phila.
Richardson and Boynton Co 1332 Arch st., Phila.
Granite.

Holmesburg Granite Co.,
Commercial Trust Bldg., Phila.

Hauling Contractors.

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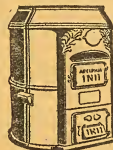
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Vol. XXXIII., No. 50
December 11, 1918

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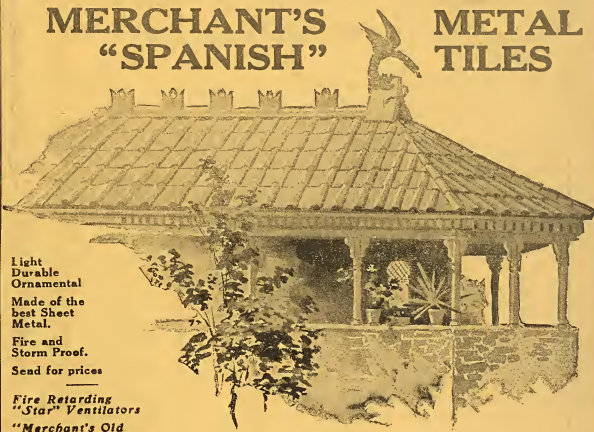
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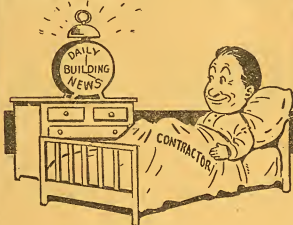


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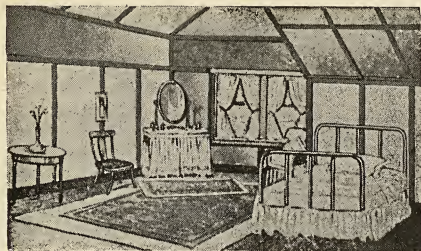
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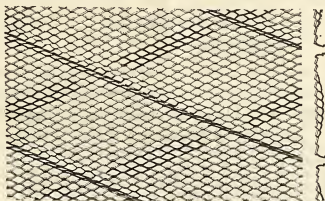
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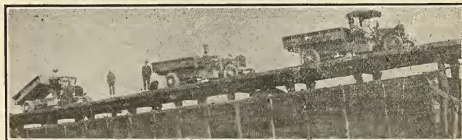
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 50

PHILADELPHIA
December 11, 1918

BUILDERS' GUIDE

OFFICES, PERRY BUILDING (Suite 824-825-826)
Sixteenth and Chestnut Sts., Philadelphia, Pa.

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As The Editor Sees It



SINCE the first steps toward peace have been concluded, it is very evident that efforts toward readjustment cannot be expended too quickly. Everything possible must be done, as soon as possible, to put the industries of the country into activity, in order to take care of the labor now being released by the curtailment and gradual cessation of the war industries.

No industry is more necessary to fulfill this function than the building industry, and from every hand comes encouragement and cheer for all branches of this field. Mr. McAdoo has issued a statement, reassuring to contractors and builders as to plans for big construction by the Government. Mr. McAdoo said:

"The changed conditions brought about by the conclusion of the armistice and the manifest inability of Germany to renew the conflict, emphasizes the importance of resuming, with as little delay as possible, the normal industrial activities of peace. Construction work, which has been delayed because of the necessities of war, should now be resumed, and I have therefore instructed the Supervising Architect to invite bids for the construction of new buildings and extensions authorized by the Congress.

Among the first moves of the Treasury Department, in pursuance of the new policy of the resumption of building operations, will be to take up, with the commission appointed by the Congress for that purpose, the question of

constructing an archives building in Washington.

The resumption of construction work by the Government will contribute toward facilitating the industrial transition of the country from a war to a peace basis, and should serve to encourage others to undertake without delay the fulfillment of the many and varied industrial peace needs of the country."

To make everything as easy as possible for the building industry, the War Industries Board has entirely removed every restriction formerly put upon it.

It will take some time to meet the need for houses which has been growing since the beginning of the war, and there will be great demands from every quarter for materials. Such notices as this we read every day:

At a recent public meeting at Niles, Mich., to consider plans for housing, a committee appointed at a previous meeting presented a report, in which the committee finds the need for additional houses more acute than anticipated and estimates that there will be this winter and coming spring an actual demand for a minimum of 300 new houses. The committee recommends the formation of a corporation, to be known as the Niles Building and Land Company, with a capital of not to exceed \$99,000, divided into shares of \$10 each, par value, this company to construct houses at a cost not to exceed \$3,500 each, and sell same when com-

pleted to workmen. At the meeting committees were appointed to solicit subscriptions to the stock of this construction company.

We must not lose sight of the fact that a great deal of building material will be exported, just as soon as there are ships to carry it over. France has already appropriated \$680,000,000 for immediate reconstruction work; \$360,000,000 is to be spent on railroad work, \$200,000,000 on port, bridge and highway construction, \$100,000,000 for public works in the provinces and communes, and \$20,000,000 to help solve the problem of temporary employment.

Philadelphia and vicinity has been a centre of great war activity. Great plants along the Delaware River, from Trenton to Chester, have drawn an army of workers to Philadelphia territory. All these plants will continue to operate, and have enough work to keep them busy for the next sixteen months. Most of the munition plants can be turned into peace plants within two weeks.

All this augurs well for the prosperity of Philadelphia during the days of the Reconstruction. With proper foresight given the problems of readjustment, Philadelphia has opportunity for great activity in peace industries. This, of course, will mean further stimulus to the building industry, and the Philadelphia Operative Builders' Association have pledged themselves to put

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on the market in this city 10,000 houses before next summer.

Reports from architects and engineers throughout the country show \$45,000,000 of projected construction. In Philadelphia, the total proposed construction—from 42 offices—\$43,740,000, divided approximately as follows:

Industrial and office buildings, \$14,968,000.

Apartment houses, hotels and residences, \$13,724,000.

Institutional, church and municipal buildings, \$15,032,000.

In Trenton and Camden, N. J., the total proposed construction—from 11 offices—\$3,955,000, divided approximately as follows:

Industrial and office buildings, \$675,000.

Apartment houses, hotels and residences, \$145,000.

Institutional, church and municipal buildings, \$3,135,000.

In eastern Pennsylvania (outside of Philadelphia), total proposed construction—from 15 offices—\$4,250,000, divided as follows:

Industrial and office buildings, \$1,195,000.

Apartment houses, hotels and residences, \$400,000.

Institutional, church and municipal buildings, \$2,620,000.

The optimism prevailing throughout the country and the feeling that now is the time for architects and the building trades to plan for big business is expressed by *The Architect and Designer*, of California:

"The world's greatest of all wars is over. For years it has been waged with appalling disaster—more than ten million lives have been sacrificed and one hundred and fifty billions of dollars have been expended. It will take many months before we shall again have normal conditions, but the future no longer holds forth that uncertainty, that fear, which stayed the activity in all things other than those which contributed for the winning of the war. From now on we may plan and prepare for the future with every assurance of an early realization of our efforts.

Probably no industry in the United States has been harder hit than the building trades, and no profession has suffered more than the architects. Construction work, aside from that which the Government deemed essential for the winning of the war, has for months been at a standstill. Building material houses have either closed down altogether or are struggling along with depleted forces; great lumber yards and planing mills have been idle except for the handling of essential work; the iron and steel shops have been busy only on

shipbuilding necessities; the clay products and the cement industries have been forced practically out of business—and so on down the line. But the sacrifices and losses which these people have suffered have not been in vain. The victory which has been won has more than recompensed those who have suffered.

As to the future—it is going to be largely what we make it. The opportunity will be there. The shipbuilding industry, which has in a very large measure been responsible for disrupting other lines of building, may be said to have reached its pinnacle, and with its decline there will come new life to the general building industry. Already the ban has been removed. Right now is a splendid time to prepare for the future. The firms that are ready will be the ones most likely to receive the greatest benefit when the country again falls into its normal stride. It is believed that San Francisco is on the eve of a building boom the like of which has not been seen since the memorable days of reconstruction that followed the great fire of 1906. There is much necessary building to be done. For nearly a year it has been "patch work"—and improvements have all been of a temporary character. New commercial buildings, office structures, public buildings, apartments, all are needed, badly needed, and it remains only for the banks to resume loaning money when the construction revival will begin. The banks may be requested to withhold loans for large building enterprises until after the final Liberty Loan. In this case heavy construction would probably not be permitted before next spring. This would be a very satisfactory time, since there is seldom much activity during the rainy season. As concrete evidence of an approaching boom, one prominent San Francisco architectural firm is reported as having three million dollars' worth of work—office and commercial buildings—that will go ahead in the spring. The plans already have been started.

It was not so many months ago that we heard some architects and builders deploring the fact that they had neglected to choose other walks of life for their livelihood. Today these same men, in fact all of us, are glad, so glad, that we are architects, and engineers and builders, for there is no profession and no business in the world that holds forth a more promising future."

The removal of building restrictions will reopen the field for interior trim and flooring. Wood using industries whose operations have been limited should soon resume operations on a

large scale, and come on the market for extensive stocks.

Commercial demands have been slightly stimulated, but Government consumption still continues so heavy, that there is very little stock available for any other uses.

War plants which have been good customers are expected to be diverted into peaceful channels as quickly as they are released from Government work and their requirements will continue. On the whole, the possibilities that the future holds in store are very promising and justify the general spirit of optimism that prevails.

STEEL EXPORTS TO ITALY.

The War Trade Board announces that licenses for the exportation of steel to Italy will be granted only upon the receipt of evidence that the steel will be transported at a rate of freight not exceeding that of \$67.50 per ton of 2,240 pounds, or 40 cubic feet, ship's option, on pieces and packages not over 4,480 pounds, as established by the United States Shipping Board. The rate applies to the following: Structural iron and steel, iron and steel shapes, plates, nails, bolts, nuts, sheets, plain and corrugated, plain and barbed wire, billets, bars, rails and fastenings, pig iron and pipe.

It is stated that this ruling does not apply to applications for licenses to ship steel purchased by the British, French or Italian Government.

The War Trade Board has by a new ruling, extended the restriction upon the importation of wood to include all woods, except those imported from Mexico or Canada by other than ocean transportation, and from Europe or Mediterranean Africa under the backhaul privilege. All outstanding licenses for the importation of wood, except cedar, as specified in or classified under paragraph 647 of the Tariff Act of 1913, have been revoked as to ocean shipment made after Oct. 25, 1918; and hereafter no licenses will be issued for the importation of such woods, except cedar, and except to cover the following:

1. Shipments from Mexico or Canada by other than ocean transportation, when such commodities originate in such countries.

2. Shipments from Europe or Mediterranean Africa when coming as return cargo from convenient ports where loading can be done without delay.

The impractical dreamers are not the architects, but the clients themselves, as a rule.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING: CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residences (3), Somerton, Philadelphia. Architects, Heneock & Hokanson, Bailey Building, Philadelphia. Owner, D. Brewer Gehley, 1712 North Eighteenth street, Philadelphia. Frame and plaster, 2½ stories, 27x32 feet, stone foundations, slate or asbestos shingle roof, hardwood floors, warm air heating, electric lighting (excavation and masonry reserved). Plans completed. Architects ready for sub-bids.

Office Building (interior alts.), 925 Chestnut street. Architects, Bunting & Shrigley, 603 Chestnut street, Philadelphia. Owners, Federal Reserve Bank, on premises. Consists of changing and rearranging partitions, cabinet work. Architects have received bids.

Garage (add.), Cora street and Lambert street, Philadelphia, \$3,000. Architect, private plans. Owners, J. J. Dobson, Inc., 809 Chestnut street, Philadelphia. Stone, 1 story, 14x74 feet, slag roof. Owners will build.

Factory and Garage (add.), Crawford street and Ridge avenue, \$23,000. Architect, private plans. Owners, J. & J. Dobson, Inc., on premises. Stone, 2 stories, 100x65 feet, and 1 story, 25x75 feet, slag roof, electric lighting, cement work. Owners will build.

Apartment House (add.), Oak Lane, Philadelphia, \$7,000. Architects, Folsom & Stanton, 1328 Walnut street, Philadelphia. Owner's name withheld. Brick, 2 stories. Preliminary

plans in progress. Too early for details.

Factory, Sixteenth and Hamilton streets, Philadelphia. Architect, Horace Wells Sellers, Stephen Girard Building, Philadelphia. Owners, Wm. Sellers Co., Sixteenth and Hamilton streets, Philadelphia. Reinforced concrete, 5 stories, 52x108 feet, slag roof, concrete foundations, steam heating, electric lighting, cement floors, rolled steel sash, fire doors, metal bath, electric elevator, safety treads, rolling steel doors. Plans completed. Architect ready for bids.

Victory Arch and Court of Honor, Broad street, from Chestnut street to Walnut street, Philadelphia. Architects, Horace Trumbauer and Jacques Greber, associated, Land Title Building, Philadelphia. Owner, Joseph E. Widener, chairman of Council of Philadelphia National Defence, Land Title Building, Philadelphia. Frame and plaster, concrete and cement work, miscellaneous metal work, lumber and carpenter work, plastering and ornamental work, painting, electrical work, modeling, flags, banners and decorations, metal lath. Architects taking bids, due December 12th at noon. Warren-Moore Co., Colonial Trust Building; Irwin & Leighton, 126 North Twelfth street; Geo. F. Payne Co., 401 South Juniper street; Doyle & Co., 1519 Sansom street, and Cramp & Co., Denckla Building, are figuring.

street, Philadelphia. Plumbing, hot water heating, plastering, painting, slag roof, general alterations, cement floor. Contract awarded to F. E. Wallace, 1220 Chancellor street.

Warehouse, 837-89 North Third street, Philadelphia, \$1,000. Architect, private plans. Owner, H. Simon, on premises. Consists of general fire repairs. Contract awarded to Wm. F. Koelle & Co., Twenty-sixth and Oxford streets.

Residence (alts.), 430 South Fortieth street, \$2,000. Architect, private plans. Owner, E. E. Bratton, 119 South Thirty-ninth street, Philadelphia. Brick, fire tower, steam heating, changing dwelling to rooming house. Owners will build.

Tool and Wood House, northwest corner of Norwood and Sunset avenue, \$1,350. Architect, private plans. Owner, Mrs. Susan N. Morris, on premises. Hollow tile, 1 story, 17 feet 8 inchesx31 feet 4 inches. Contract awarded to J. P. Thompson, Real Estate Trust Building.

Factory and Storage (alts.), 236 North Third street, \$800. Architect, private plans. Owners, Cover & Co., 242 North Third street, Philadelphia. Repairs and alterations, cement floor. Contract awarded to Geo. Kessler Cont. Co., Drexel Building.

Bakery (add.), northeast corner of Fifty-seventh and Race streets, Philadelphia, \$24,800. Architect, private plans. Owner, Quaker City Cracker Co., 4011 Baring street, Philadelphia. Brick, 3 stories, 45x80 feet, steam heating, electric lighting, slag roof, cement floors. Contract awarded to David A. McClelland, 4011 Baring street.

Garage, 5970 Drexel Road, Philadelphia, \$1,175. Architect, private plans. Owner, Geo. B. Smitheman, on premises. Stone, 1 story, 25x27 feet, slate roof, cement floor. Contract awarded to Frank C. Graham, 2927 North Eighth street.

Garage, 347 East Wyoming avenue, Philadelphia, \$525. Architect, private plans. Owner, Mrs. W. T. Will, on premises. Brick, 1 story, 16x16 feet, slag roof, cement floor. Contract awarded to H. Betel, 1354 Unity street, Philadelphia.

The "Guide" is published weekly. It comes to your office fifty-two times in a year for five dollars.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Power House (add.), Butler street and Glenwood avenue, \$5,000. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Iron, 1 story, 15x40 feet. Contract awarded to Wm. Steele & Sons, Sixteenth and Parkway.

Hospital (add.), northwest corner of Forty-fourth and Market streets, \$1,800. Architect, private plans. Owners, Pennsylvania Hospital, on premises. Brick and stone, 1 story, 17½x44 feet. Contract awarded to J. Morris Daniel, 252 South Juniper street.

Factory (add.), Rector and Main streets, Manayunk, \$6,000. Architect, private plans. Owners, Imperial Woolen Co., on premises. Brick, 3 stories, 18x37 feet, plumbing, new outside stairway. Owners will build.

Factory (alts.), Rector and Main streets, \$3,500. Architect, private plans. Owners, J. & J. Dobson, on premises. Tearing down and rebuilding stone walls. Owners will build.

Chimney, Allegheny avenue and Tulip st., \$2,210. Architect, private plans. Owners, David Lupton Sons, on premises. Brick, 86 feet high. Contract awarded to H. R. Heinecke, Inc., Stephen Girard Building.

necke, Inc., Stephen Girard Building.

Factory (add.), 1912-14 South Water street, Philadelphia, \$2,400. Architect, private plans. Owner, Charles Schlorer, Front and Mifflin streets, Philadelphia. Brick, 2 stories, 40x30 feet, slag roof, tearing down two buildings. Contract awarded to John Hausman, Third and Tasker streets.

Factory, Wheatsheaf Lane and Sepviva st., \$42,000. Architect, private plans. Owners, American Eng. Co., on premises. Reinforced concrete and brick, 1 story, 100x151 feet, composition roof, steel sash, cement floor, electric lighting. Contract awarded to the Austin Co., Bulletin Building, Philadelphia.

Tenement House (add.), 1429 North Fifteenth street, Philadelphia, \$3,000. Architect, private plans. Owner, H. P. Woodward, Moylan, Delaware County, Pa. Brick, 3 stories, hot water heating. Contract awarded to R. T. Marshall, 4213 North Sixth street, Philadelphia.

Residence and Garage (alts.), 1930 Delancey street, Philadelphia. Architect, private plans. Owner, Wm. Patterson, 130 South Fifteenth

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ETC., ETC.

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PENNSYLVANIA

Construction News

Residence, Allentown, Pa. Architect, An-
row C. Borzner, 89 West Sharpneck street,
Germantown. Owner, Tenman Ruff, Allen-
town, Pa. Brick, 2½ stories, 24x33 feet, slate
roof, hot water heating, electric lighting, tile
work, yellow pine floors. Plans about com-
pleted. Owner will be ready for bids in about
one week.

Residence, Kirklyn, Pa. Architects, Folsom
& Standon, 1328 Walnut street, Philadelphia.
Owner, Dr. R. C. Strode, 700 North Forty-
third street, Philadelphia. Stone and plaster,
2½ stories, 30x35 feet, asphalt roof, hot water
heating, electric lighting. Architect taking
bids. Warren E. Biscoe, Forty-third and
Brown streets, only bidder.

Water Supply, Pump House and Ash Pits,
Bethlehem, Pa. Engineer, Samuel T. Wagner,
Reading Terminal, Philadelphia. Owners,
Philadelphia and Reading R. R. Co., Reading
Terminal, Philadelphia. Concrete pump house,

14x21 feet. Owners taking bids, due Decem-
ber 14th. F. A. Havens Co., 845 North Nine-
teenth street; Roydhouse-Arcey Co., 112 North
Broad street; Wm. Steele & Sons Co., Six-
teenth and Parkway, are figuring.

Shop (add.), Forty Port, Pa. Architects,
Ballinger & Perrot, Seventeenth and Arch
streets, Philadelphia. Owners, International
Fabricating Corp., Wilkes-Barre, Pa. Brick,
steel and concrete, 2 stories, 51x160 feet, slag
roof. Plans in progress.

Residence (alt. and add.), Devon, Pa., \$22-
000. Architect, Wesley L. Blithe, 608 Chest-
nut street, Philadelphia. Owner, George R.
Lancaster, 1303 North Broad street, Philadel-
phia. Stone and rough cast, 2½ stories, 82x
50 feet, slate roof, hardwood floors (hot water
heating, electrical fixtures and plumbing re-
served), electric lighting, tile and marble
work. Contract awarded to Gray Bros., Rose-
mont, Pa.

NEW JERSEY

Construction News

Naval Station, Cape May, N. J., Spec. 3686.
Architect, private plans. Owners, U. S. Gov-
ernment, care of Commandant of the Naval
District, Twelfth and Chestnut streets, Phila-
delphia. Frame and concrete, 1 story. Photo-
graph Laboratory, 50x25 feet; Machine Shop,
50x100 feet; Store House, 35x100 feet, Armory
and Workshop, 30x60 feet; Seaplane Hangar,
110x160x32 feet; new and remodeled Hangar,
concrete platform, concrete foundations, steam
heating, electric lighting, roof ventilators,
gasoline storage system, built-up and slate
surfaced asphalt shingle roof. Owners taking
bids, due December 30th at 11 A. M. Crump
& Co., Deneka Building; F. W. Mark Cont.
Co., Finance Building; Wark & Co., 1737 Fil-
bert street, and Lam Building Co., 1001 Wood

street; Wm. Steele & Sons Co., Sixteenth and
Parkway, are figuring.

Post Office, Woodbury, N. J. Architect, Jas.
A. Wetmore, Treasury Department, Washing-
ton, D. C. Owners, U. S. Government, care of
Supervising Architect, Treasury Department,
Washington, D. C. Brick and concrete, 2 stor-
ies, 59x64 feet, slag roof, concrete founda-
tions, steam heating, electric lighting, tile,
marble and terrazzo work, kalsmin doors,
cement floors, safety trends, waterproofing.
Owners taking bids, due January 7th, 1919.
John M. Yardley, 1716 Sansom street;
Thomas C. Trafford, 1613 Sansom street; Lam
Building Co., 1001 Wood street; H. H. Weh-
meyer, 509 West Cumberland street; F. A.
Havens & Co., 845 North Nineteenth street;

F. J. Boas, 201 North Broad street! Wills-
Ludwick Co., 1708 Sansom street, Philadel-
phia, are figuring.

Miscellaneous Construction News

Radial Brick Towers (20), Monroe, N. C.,
\$3,000,000. Architect, private plans. Owners,
U. S. Government, care of C. W. Parks, Chief,
Bureau of Yards and Docks, Navy Depart-
ment, Washington, D. C. Brick, concrete and
steel, 500 feet high. Time extended to De-
cember 18th. No bids received on November
25th.

Residence, Greensboro, N. C., \$25,000. Ar-
chitect, Charles Barton Keen, Bailey Build-
ing, Philadelphia. Owner's name withheld.
Frame and shingle, 2½ stories, 56x36 feet and
20x30 feet, shingle roof, vapor heating, elec-
tric lighting, hardwood floors. Plans in pro-
gress.

Office Building, Irving Park, Greensboro,
N. C. Architect, Charles Barton Keen, Bailey
Building, Philadelphia. Owners, Southern Life
and Trust Co., A. W. McAlister, president,
Greensboro, N. C. Brick, reinforced concrete,
fireproof, 2 stories, 45x115 feet, two wings,
45x100 feet, tile roof, cement floors, metal
lath, hollow tile, fan system of heating, elec-
tric lighting, tile and marble work. Plans in
progress. Owner will sub-let in the spring.

Garage, Greenhouse and Outbuildings, Ros-
lyn, Long Island, N. Y. Architect, John T.
Windrin, Commonwealth Building, Philadel-
phia. Owner, Nicholas F. Brady, 24 Wall
street, New York City. Brick, stone and
frame. Plans in progress. Too early for de-
tails.

War Community Service Building, Cam-
den, N. J. Architect, private plans. Owners,
War Community Service Council, care of Rot-
ary Club, Camden, N. J. Brick, 1 story,
yellow pine floors, slag roof, wallboard. Con-
tract awarded to Lewis T. West, 828 Broad-
way, Camden, N. J.

Patern Storage Building, Ringgold and
Pine streets, Camden, N. J. Architect, private
plans. Owners, Camden Iron Works, care of
H. Lippincott, Second and Market streets,
Camden, N. J. Brick and frame, covered with
asbestos, hollow metal skylights, slag roof,
fire door. Contract awarded to Lewis T.
West, 828 Broadway, Camden, N. J.

**SCALES
AND
VALVES**

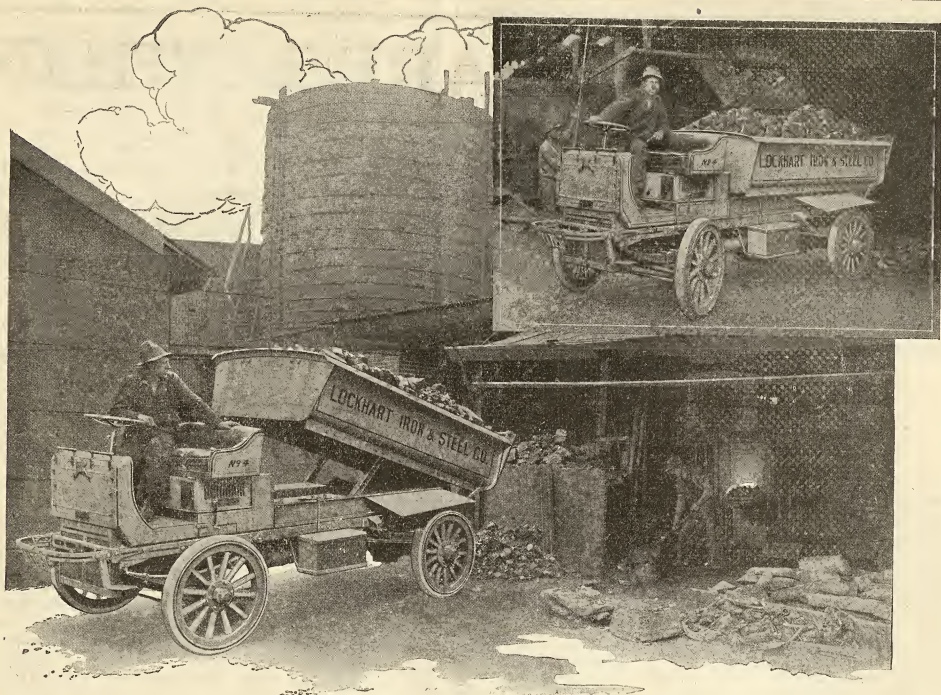
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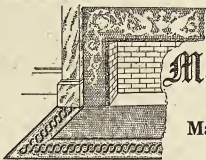
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Philadelphia, Pa.

awarded to Fisher & Carezza, Calvert Building, Baltimore, Md.

Pumping Station (water), St. Helena, Md. Architect, Edw. L. Palmer, Jr., 519 N. Charles street, Baltimore, Md. Owners, Liberty Housing Co., care of E. H. Corp., 140 N. Broad street, Philadelphia. Brick, 2 stories, 35x50 feet, slate roof, electric lighting, hollow metal skylights, ventilators, plumbing. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore, Md.

MARYLAND Construction News

Garage, 25 Summerset Road, Guilford, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore. Owner, Howard Hubbard, American Building, Baltimore. Brick, 2 stories, slate and tin roof, hot water heating, electric lighting, hollow metal skylights, ventilators, composition floors. Architects taking bids, due December 16th. W. E. Harn, 2314 Oak street; Gladfelter & Chambers, Thirty-sixth street and Roland avenue; John S. Busiek, 2500 Guilford avenue; John F. Kunkel, 29 Sherwood avenue, are figuring.

Hospital, Salisbury, Md. Architects, Owens & Sisco, Continental Building, Baltimore, Md. Owners, Peninsula Hospital, Salisbury, Md. Brick, 3 stories, 40x70 feet, stone trim, stone foundations, tile roof, steam heating, electric lighting, ornamental iron work, elevator, hollow metal skylights, ventilators, concrete work, dampproofing, hollow tile, tile and terrazzo work, composition floors, dumbwaiters, dampproofing, plastering, painting,

plumbing. Plans in progress.

General Store Building, Annapolis, Md. Architect, private plans. Owners, U. S. Government, Bureau of Yards and Docks, Washington, D. C. Reinforced concrete, brick and frame, 3 stories, granite trim, slag roof, steam heating, electric lighting, hollow metal skylights, electric elevators, hollow tile, fireproofing and dampproofing, metal lath, tile and terrazzo work, dumbwaiters. Lowest bidder, James L. Marshall, Tenth and G streets, Washington, D. C., \$82,448.

Church, York Road, Baltimore, Md. Architect, John Fround, 11 East Lexington street, Baltimore, Md. Owners, Gregory Baptist Church, Govans, Md. Brick and steel work, steam heating, slate roof, metal ceiling, electrical work. Architect taking bids. John Waters Co., 23 East Center street; Hicks, Tase & Norris, 406 West Madison street, and E. Eyring & Sons, 800 South Third street, are figuring.

Proposals

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INVITATION FOR PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., December 5, 1918.—Sealed proposals will be opened in this office at 3 P. M., December 30, 1918, for construction of Female Nurses' Quarters for the United States Marine Hospital at New York, N. Y. (Stapleton). Drawings and specifications may be obtained from the Supervising Chief Engineer Room 731, United States Custom House, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

MARYLAND Contracts Awarded

Building (alts.), 306-10 North Howard street, Baltimore. Architects, Owens & Sisco, Continental Building, Baltimore, Md. Owners, Acker, Merrill & Condit Co., 220 N. Charles street, Baltimore. Consists of general alterations, including hollow tile, metal lath, plastering, tile work, composition and hardwood floors, dumbwaiters, hollow metal skylights, ventilators, fireproofing and dampproofing, electric lighting, freight elevators, refrigerators, heating, steel and iron work. Contract awarded to Consolidated Eng. Co., Calvert Building, Baltimore, Md.

Coal Bunkers, Baltimore, Md., \$15,000. Architect, private plans. Owners, Baltimore and Ohio R. R. Co., Baltimore, Md. Grading, concrete work, heavy timber. Contract awarded to Melvor Const. Co., Law Building, Baltimore, Md.

Ice Manufacturing Plant, Milton avenue, south of Chase street, Baltimore, Md. Engineer, W. Mortensen, 349 Columbus avenue, New York City. Owners, American Ice Co., Calvert Building, Baltimore, Md. Brick and concrete, 1 story, 70x90 feet, slag roof, electric lighting, steel and iron work, hollow metal skylights, ventilators, composition floors, tile work, dampproofing, refrigerators. Builder George H. McEnter, 349 Columbus avenue, New York City, is taking sub-bids.

Pumping Station (Sewerage), St. Helena, Md. Architect, Edw. L. Palmer, Jr., 519 N. Charles street, Baltimore, Md. Owners, Liberty Housing Co., care of E. H. Corp., 140 N. Broad street, Philadelphia. Brick, 37x50 feet, slate roof, electric lighting, steel and iron work, hollow metal skylights, ventilators, plastering, plumbing, painting. Contract

MODERN BLUE PRINT ESTABLISHMENT

Charles H. Robbins, Jr., blue print paper, blue prints, tracing paper, drawing materials, etc., for the last six years at 125 South Eleventh street, Philadelphia, has moved to new and larger offices, storage and work rooms at 1209 Arch street, Philadelphia. Mr. Robbins, desirous of giving utmost safety to the tracings entrusted to his care for reproduction, has transferred his plant and equipment to new headquarters, where he can assure maximum protection to valuable sketches, drawings and plans. Mr. Robbins in his new plant—fireproof and modern in every phase—is equipped to supply everything in blue print paper, tracing paper, drawing materials and prepared to handle expeditiously all blue print work.

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HEATING

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Alterations and Additions

Steel Mills, south side of Lewis, west of Tacony street, \$30,000. Illingsworth Steel Co. (O), Tacony and Lewis streets. Irwin & Leighton (C), 126 North Twelfth street. Iron, 1 story, 41x38 feet, 102x144 feet and 27x46 feet.

Radial Chimney, Sepviva and Erie avenue, \$3,385. Savage Arms Co. (O), on premises. H. R. Heinecke, Inc. (C), 21 S. Twelfth street. Brick, 100 feet high.

Radial Chimney, Stokley and Roberts sts., \$5,140. American Insulation Co. (O), on premises. H. R. Heinecke, Inc. (C), 21 S. Twelfth street. Brick, 113 feet high.

Factory, northwest corner of Wheatheaf Lane and Sepviva street, \$38,000. American Eng. Co. (O), on premises. Autin Co. (C), Bulletin Building. Steel frame, 1 story, 100x151½ feet.

Tank Storage, north side of McKean street, east of Dilworth street, \$1,600. The Texas Co. (O), Widener Building. Latta & Roberts (C), Drexel Building. Piling and steel.

Garage, -1355 Harrison street (rear), \$400. Wm. Wolstenholme (O), on premises. Brick, 1 story, 10x20 feet.

Store and Dwelling, 812 Oxford street, \$500. M. J. Markmann (O), 1001 Chestnut street. Lam Building Co. (C), 1001 Wood street.

Dwelling, southwest corner Fifth and Gertrude streets, \$750. Jacob S. Buttenklepper (C), 1015 South Fourth street. M. Cylinder (C), 521 Mifflin street. Changing store and dwelling to private dwelling.

Factory, north side of Rector street, west of Main street, \$6,000. Imperial Woolen Co. (O), on premises. Brick, 3 stories, 18x37 feet, toilet building and outside stairway.

Factory, north side of Rector street, west of Main street, \$3,500. J. J. Dobson (O), on premises. Tear down and rebuild stone walls.

Garage, south side of Cora street, west of Lambert street, \$3,000. J. J. Dobson, Inc. (O), 809 Chestnut street. Stone, 1 story, 14x74 feet.

Power House, north side of Butler street, east of Glenwood avenue, \$5,000. Pennsylvania Railroad Co. (O), Broad Street Station. Wm. Steele & Sons (C), Sixteenth and Parkway. Iron, 1 story, 15x40 feet.

Factory, south side of Crawford street, east of Ridge avenue, \$2,000. J. & J. Dobson, Inc. (O), 809 Chestnut street. Stone, 2 stories, 100x65 feet.

Garage, south side of Crawford street, east of Ridge avenue, \$3,000. J. & J. Dobson, Inc. (O), 809 Chestnut street. Stone, 1 story, 25x75 feet.

Hospital, northwest corner of Forty-fourth and Market street, \$1,800. Pennsylvania Hospital (O), on premises. Stone and brick, 17½ x44 feet. J. Morris Daniel (C), 252 South Juniper street.

Enclosed Dock, 5317 North Camae street, \$400. C. G. Sullivan (O), 5317 North Camae street. C. W. McDowell (C), 2118 Diamond street.

Tenement, 1429 North Fifteenth street, \$3,000. H. P. Woodward (O), Moylan, Dela-

Bell Phone: Market 3158

Keystone Phone: Main 174

ROMAN MOSAIC & TILE CO., Inc.

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PHILADELPHIA, PENNA.

ware County, Pa. R. F. Marshall (C), 4213 North Sixth street. Brick, 3 stories, 14x12½ feet.

Office, Thirty-second and Powelton avenue, \$1,500. Pennsylvania Railroad Co. (O), Broad Street Station. Brick, 1 story, 11x32 feet.

Temporary Storage Building, Thirty-second and Chestnut streets, \$550. Pennsylvania Railroad Co. (O), Broad Street Station. Frame, 1 story, 8x48 feet.

Telephone Exchange, southeast corner of Fifty-seventh and Chestnut streets, \$3,235. Bell Telephone Co. (O), Seventeenth and Arch streets. F. L. Hoover & Sons (C), 1023 Cherry street. Brick, new mastic partitions, glass transoms.

Factory, 2120 Nicholas street, \$10,000. Geo. B. Rush (O), 2120 Nicholas street. Ernest H. Sturtz (C), 1233 Wyoming street. Brick.

Dwellings (15), east side of Fernhill street, north of Apsley street, \$4,200. John McClatchey (C), Land Title Building. Brick, 2 stories, 16x32 feet, 12x32 feet, slag roof, hot water heating.

Ice Cream Factory, 3336-38 Market street, \$60,000. Supplee-Wills-Jones & Co. (O), Twenty-fifth and Jefferson streets. Geo. Kessler Cont. Co. (C), Drexel Building. Brick, steel and concrete, 3 stories, 50x40 feet, slag roof, steam heating, electric lighting, cement, asphalt and mastic floors.

Auto Storage, north side of Gray's Ferry avenue, west of Thirty-sixth street, \$5,300. D. B. Martin Co. (O), on premises. Henry P. Friend (C), Norristown, Pa. Brick, 1 story, 50x101 feet, rubberoid roof.

Store and Dwelling, 401-03 North Sixtieth street, \$800. Julius Crass (O), 401 North Sixtieth street.

Store and Dwelling, 2631 Walnut street, \$500. Frank R. Piper (C), 2631 Walnut street. Warren E. Biscoe (C), 3954 Ludlow street. Brick, third story, 1116 feet, slag roof.

Store, 6013 Market street, \$600. Reese Howard (O), 6005 Market street. J. D. Fisher (C), 5424 Thompson street.

Store and Dwelling, 1206 Point Breeze avenue, \$500. F. Berstein (O), 1261 South Twenty-first street. F. P. Dillon (C), 1223 South Twenty-third street. Brick, front and side wall.

Building (repairs), Thirty-sixth and Gray's Ferry Road, \$1,000. Barrett Manufacturing Co. (O), on premises.

Dwelling, 3147 Taylor street, \$300. Lewis Lanee (O), John Roman (C), 4908 Wayne avenue. Brick, 1 story, 10x12 feet.

Saloon and Dwelling, northwest corner of Ridge and Columbia avenue, \$400. A. McClintock (O), 1937 Ridge avenue. New steam boiler.

Dwelling, 804 North Twenty-fourth street, \$300. R. H. Mott (O), 1255 North Twentieth street. S. A. Long (C), 921 North Twenty-eighth street.

Garage, west side of Forty-third street, south of Woodland avenue, \$12,760. W. S. P. Shields (O), Witherspoon Building. D. Henwood (C), 1509 Wood street. Brick, 1 story, 71x103 feet, slag roof.

Garage and Dwelling, 1930 Delancey street, \$5,000. Wm. Patterson (O), 130 South Fifteenth street. F. E. Wallace (C), 1220 Chancellor street.

Garage, 1608 Market street, \$4,900. H. H. Paul (O), on premises. Bowers Bros. & Co. (C), 1629 Ludlow street. Hot water heating.

Warehouse, 837-39 North Third street, \$1,000. Simon Weil (O), on premises. Wm. F. Koelle & Co. (C), Twenty-sixth and Oxford streets. Fire repairs.

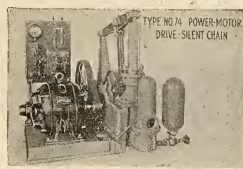
Radial Chimney, north side of Allegheny avenue, west of Tulip street, \$2,210. David Lupton Sons (O), on premises. H. R. Heinecke, Inc. (C), 21 South Twelfth street. Brick, 85 feet 8 inches high.

THE WORKINGMAN AND HIS HOUSE

The laboring man is coming into his own. The advantages of organization and unified control are receiving abundant demonstration in the present results of the long struggle that the labor organizations have for years been waging

against the misshapen one-sided and unorganized industrialism of the modern world. The power of capital allied with brains and education, the inertia of slowly-built-up traditions, and the apathy of society at large, have long re-

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sisted the assaults of the unions, but are at last yielding, reluctantly in most cases, intelligently and sympathetically sometimes. In the early stages of the struggle the excesses and follies of the labor forces doubtless retarded their success, and inevitably provoked corresponding excesses on the side of the employers, while alienating the sympathies of the general public. But the light has penetrated the dark places on both sides. The desperate war of classes that once seemed impending is less likely now to occur, because the community at large, which is the sufferer in every case from strikes and lockouts, has begun to discover its own share and interest in the struggle. From a fight by more or less violent means between two opposed armies for the special interests of each, the struggle has become one of two opposed systems representing distinct ideas, in which all are concerned. The growth of Socialism among the "intellectual" and "non-laboring" elements of society is evidence of this. And since the world-war has spread its dark cloud over the earth and the foundations of ancient systems and beliefs have been shaken, many eyes have been opened. We have come to see that the position and conditions of manual labor workers, the toiling masses, are a National as well as a community concern. We are learning that until the relations of employers, employed, the general public and the Government are adjusted upon a basis of righteousness and justice, there can be full security neither for society nor State.

The fundamental evils of the industrial system which grew up during the nineteenth century have been the commercial exploitation of labor and the dehumanization of the laborer. Modern industrial production is based on the "division of labor," the elimination of muscular effort, the standardization of parts, and the mechanization of operations, all under the dominance of the ideal of productive efficiency by the increase of a standardized output with decrease of labor costs. There is nothing

intrinsically or essentially vicious in any of these aims. The manufacturer and investor have a right to desire increased profits, the superintendent to aim at increased efficiency of production; while the standardization of quantity-products and the elimination of muscular strain for the worker, by the use of power machinery, not only are not vicious, but are desirable ends in themselves.

The evils of modern industrialism lay not so much in these aims as in their abuse by excesses which wholly left out of sight the interests of the workers. These were exploited commercially, and that means that they were treated not as men and women with souls, affections and passions; not even as animals, which are cared for by their owners as a matter of common-sense and self-interest. They had become, in the minds of their employers, inanimate units, machines, or rather merely the cogs and levers of machines. Indeed, they had this apparent advantage, for the employer, over machines, that they involved no first cost whatever, nothing but use-rental, that is, wages; and seldom any cost for repairs. In this country the impouring of foreign laborers, with lower standards of living than those of the natives, promoted this downward movement of labor conditions. Moreover, the languages these immigrants spoke were, to their narrow-minded and provincial employers, especially to superintendents and foremen, not merely obstacles to mutual understanding, but marks of inferiority. These foreigners were not even "hands"; they were "dagoes," "kanucks," "wops"; often officially mere numbers on a pay-roll. Until recent years they were not even treated as machines, for they were not cared for, kept in condition for efficient production, nor retired, at the employer's charge, for repairs when incapacitated temporarily. Least of all were they cared for on the moral, social and intellectual side, or provided with decent homes, with schools and playgrounds and churches and means for healthy

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recreation. These things are necessary for human beings, but not for machines, dagoes, wops and numbers.

Hence the slums; hence the mobs and riots; hence the shocking waste of the colossal labor turn-over in our great industries.

I would not ignore the many honorable exceptions to this indictment. All praise is due to the not inconsiderable number of employers and concerns which, years ago, began to set the example of an enlightened and Christian treatment of their employees, by providing them with a decent environment both at home and in the factory, with schools and recreation and a share in the profits of their labor. But the indictment is true of our labor conditions in the mass, especially in our mining and metal and lumber industries and in our city factories, and to a less extent, but too generally, in our textile industries.

The awakening of the public conscience, aroused by the growing scandals of strikes, lock-outs and mob violence, as well as by the persistent efforts of organized labor to make the human rights of the laborer a matter of public concern, has in recent years resulted in many reforms. Both the State and the Church have advanced to higher ground than they dared formerly to occupy. Great corporations and many individual employers have seen a great light. When a notable newspaper like the *Evening Post* of New York makes public at great length the investigations of Mr. Bruere into the genesis of the I. W. W., exposing the inevitableness of violence as the fruit of injustice, and tracing the roots of the I. W. W. movement back to the fundamental iniquity of the general industrial situation, it means that we have taken the first steps toward a solution of the problems: we are seeking to understand its facts and factors. We are learning that human beings cannot be forever treated like cattle or like commodities or like machines. We are learning that the colossal turn-over of labor—impermanence of employment,

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constant shifting of laborers, and all the loss of efficiency that results—is not only a frightful wrong to the laboring class as a whole, but a blot on society, a danger to the peace of the State, and a terrible handicap to National productivity. We are learning that a discontented worker is a poor worker; and that a healthy, happy worker in a decent home is worth more, both to the State and to his employers, than one who is an unhealthy, unhappy wanderer from one factory and slum to another factory and slum.

Our entrance into the war has enforced all these lessons, bringing them widely to the consciousness of millions who had never before given serious thought to these problems. Architects are facing more than one side of the many-faced situation.

The war has greatly stimulated—if its suddenly created conditions did not first awaken—interest in community housing for industrial workers. Both the Federal Government and the great industries came to the realization of the fact that a huge responsibility and a huge problem had been precipitated upon them by our declaration of war, for which even the enormous expansion of munitions manufactures during the three previous years had by no means prepared us. The first efforts to provide housing for the thousands of workers in the vast new plants that arose as by magic, where open country had been, were, like all American expedients in emergencies, cheap, partial makeshifts, sufficient for the moment's need, but totally inadequate and unsuited for permanent use. They were villages of shacks and barracks, not of homes. They were built and financed on no definite system. It took time for our authorities, State and National, military, naval and civil, to come to any real understanding of the problem that was forced upon them. They took no counsel at first either of the experience of Great Britain or of the warnings of experts in architecture. But in this, as in everything else undertaken since April, 1917, confusion and blundering in the initial stages are giving place to intelligent management and

rational organization. Many of the great manufacturing plants engaged on Government contracts have anticipated the action of the Government by intelligent housing systems carried out under expert advice and upon designs by competent architects. The Department of Labor has, as all doubtless know, created a Bureau of Housing under the direction of Mr. Otto L. Eidlitz, of New York, with a staff of expert architects and engineers in charge of its various administrative divisions.

* * *

Of the profoundest importance is the question of the financial conditions of house-building enterprises. No solution of the problem of housing for workingmen can possibly meet the situation if it subordinates the interests and needs of the laborer to the interests of private profit. Whether managed by a syndicate or by a corporation employing labor, the two interests must be made mutual, not adverse. Not only must the house be such as the worker and his family will be content to occupy, but the price and conditions of rental and sale must be such as to appeal to him. These must take into account the mobility of labor, and provide fair and generous terms for the transfer or resale of the house in case of the worker's death or removal to another place. The majority of housing enterprises, whether private syndicated speculations, corporate employers' undertakings, Government-assisted enterprises, provide for rental with privilege of purchase on installments running through a protracted period of years with a moderate interest charge. But while it is desirable to encourage perma-

nence of residence and employment by easy terms of sale, it must be remembered that changes in an industry—the reduction of its output and working forces, fires and explosions, the abandonment of old for new processes of manufacture, reduction of wages, the offering of more profitable employment elsewhere—may make necessary the removal of a worker from the place where he had expected and wished to remain permanently. This will certainly occur on a vast scale after the close of the war. How shall the laborer's equity in his half-purchased house be disposed of at such a time? Who is to shoulder the loss consequent upon the closing up of an industry and the inevitable desertion of the village which it has built up, or which some real estate syndicate has built for it?

How can the workers of a community be protected from being victimized by the tempting offers of real estate sharks and swindlers in the immediate neighborhood of a model village?

These are questions by no means settled. Both the States and the Federal Government will doubtless have to study them with extreme care and to initiate, very cautiously, legislation to meet the situations they suggest. The *Journal of the American Institute of Architects* is to be commended for including their discussion in its program for "An American Competition for the best solution of the House Problem." The three sections of the program—The Social Purpose, The Economic Method, The Physical Plan—rightly envisage the relative importance of these three aspects of the problem, which are also properly recognized in the admirable make-up of the Jury of Award.—*Architectural Record*.



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IN COURSE OF EMPLOYMENT

Eleven Classes of Accidents for Which Employer Is Not Liable

By Geo. A. Kingston, Commissioner, Workmen's Compensation Board, Ontario, Canada. From an address presented at the Fifth Annual Meeting of the International Association of Industrial Accident Boards and Commissions, Madison, Wis.

The expression "arising out of and in course of employment," is a limitation on the classes of accidents for which compensation may be paid, and is found in practically three-fourths of the jurisdictions on this continent in which compensation laws are in force. Perhaps no expression in the laws has given rise to more discussion.

As a limitation it excludes a considerable number of accidents to workmen, the great bulk of which may be classed under the following eleven heads:

1. Street accidents.
2. Accidents while going to or from work.
3. Injuries due to scuffling, larking or horse play.
4. Accidents, as sometimes stated in legal text books, caused by the act of God or the country's enemies.
5. Injuries arising out of attempted robbery, fighting, assault or murder.
6. Disabilities due to frost bite or heat stroke.
7. Accidents occurring during moments of leisure or while performing something of a personal nature.
8. Camp accidents.
9. Accidents resulting in the aggravation of a pre-existing diseased condition.
10. Accidents due to disobedience of rules.
11. Hernia, lumbago and strain cases.

(1) Great Britain, until recently, classed street accidents as without the law on the ground that the hazard was not special, but general, i. e., one to which the public generally is exposed, and not due to the employment. This position is taken in a number of the United States, while in Ontario the view held by the Scottish courts was adopted,—that the risk of the locality is one to which the workman is exposed by reason of his employment at that time and place, and is compensable. This view was also adopted in a recent English case.

(2) Accidents occurring while going to and from work are closely related to

the foregoing, but if they occur while on the employer's premises, or while in a conveyance furnished by him as a part of the contract of employment, they would as a rule be within the act.

(3) Scuffling and larking are not a part of the duties for which a workman is employed, and injuries due thereto would therefore not be compensable; however, if the injured man is a victim of events in which he was not a participant, compensation would seem to be in order.

(4) Death by lightning will usually be regarded as compensable or not, according to the nature of the employment, i. e., as causing special exposure, or merely that shared by the public generally, though other factors may be decisive in individual cases. The same principle is applicable to injuries due to acts of the country's enemies.

(5) It is apparently a generally accepted principle of law that compensation is allowable in cases where injury to a workman performing his duty is due to assaults by fellow-workmen or by robbers; but if the assault is connected with a quarrel, or no connection with the employment is shown, the law does not apply.

(6) Injuries due to frost bite or heat stroke are to be disposed of much as in the case of lightning or bombardment, the question being whether there is such a special degree of exposure as to support the claim that the injury arose out of the employment, as distinct from the common risk of the public or other workmen not called upon to undergo like exposure.

(7) Injuries incurred during moments of leisure or while engaging in acts of a personal nature are hardly subject to a general rule, each case calling for a decision on its own merits. If the acts are reasonable, considering all the circumstances, they will not be presumed to take a man out of the scope of his employment.

(8) Where the workman lives in quarters furnished by the employer, practically his whole course of conduct is subject to conditions fixed by the employer, who is therefore responsible for accidental injuries not usually classifiable as work accidents, but which must, under the circumstances, be considered as coming within the course of the employment and arising out of it.

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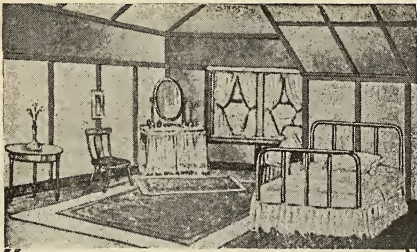
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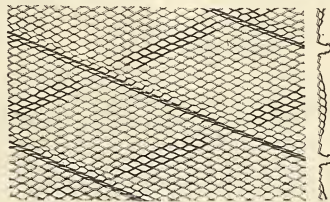
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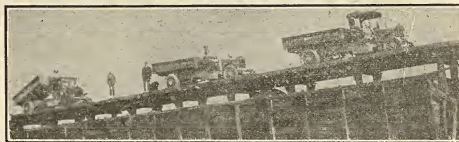
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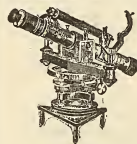
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

VOLUME XXXIII
Number 51

PHILADELPHIA
December 18, 1918

BUILDERS' GUIDE

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As The Editor Sees It



IN the few years just preceding the war there was much discussion of City Planning, Industrial Zoning, as well as of Industrial Housing. At the present moment the great thought in everybody's mind is "Reconstruction." The success of the Reconstruction period now confronting us depends in great measure on the degree in which we apply the great principles of City Planning, Industrial Zoning and Industrial Housing to the problems of the rebuilding and rehabilitating which will form a large part of this period.

We are all aware of the great waste resulting from lack of planning in the building up of a large city, and in the hurried erection of houses to meet temporary needs. According to Laurence Veiller, Secretary of the National Housing Bureau:

"There are today in the United States, in round figures, some 230 improved housing developments. Some are good, some are bad; some are old, some are recent. Many are employers' enterprises built for their employees; others are so-called 'model' housing schemes. There is not one of them, however, of which one could say to an employer wishing to do the right thing 'Copy that.'"

It is essential, then, to realize that any reconstruction, based upon a plan adequate only for the present is antiquated at the time of completion.

Therefore, we urge the necessity of

the thought and advice of the best brains in the country; the co-operation and co-ordination of business men and business organizations for the common good; the necessity of time to evolve the most comprehensive and far seeing plans to meet the needs—not only of the present—but of the great prosperous future which stretches ahead.

A very convincing argument in favor of Industrial Zoning was presented by Mr. Herbert Swan, executive secretary Zoning Committee, New York City, before the National Conference on City Planning, held by the American City Planning Institute at St. Louis, and we print the paper in full on another page of this issue.

* * *

SINCE the return of the concrete ship "Faith" from a series of voyages which have carried her 11,000 miles since she left San Francisco last spring, it seems safe to predict the success of concrete as a material for shipbuilding. The "Faith" has been carefully inspected by experts, who found her water tight, more so perhaps than the usual steel vessel. The cracks found were not deep, and there was no suggestion of open fissures in the side of the ship. The Faith encountered terrific storms off the coast of Oregon and later off Hatteras during an early voyage, but did not take water, and her builders declare her absolutely dry.

THE agitation at present to make Philadelphia a great shipping centre is of utmost interest to all business of this city. Coming now when the whole country is about to prosper on reconstruction work, we would profit immeasurably by increased port facilities. Certainly this is the psychological moment to press this issue and it is imperative that the Building Trades get back of this movement and do all to stimulate interest and put some really forceful pressure on those about to inaugurate this development.

When business is slow for some reason or other,—is the very time to advertise. When your car gets stuck on a muddy bit of road, you don't go and sit on the bank,—you push, to put it across. Do the same with your business.

MEETING AT MASTER BUILDERS' EXCHANGE.

A meeting of the members of the Master Builders' Exchange of Philadelphia and their friends will be held at the Exchange rooms, 18 South Seventh street, Thursday evening, December 19, at 8 o'clock P. M., at which Mr. John J. Kelley, President of the National Contractors' Association, Inc., will make an address.

The purpose of this meeting is to present the workings of this association, which has been formed to guarantee to builders the costs of their estimating, and to secure, if possible, the co-operation of the Philadelphia builders.

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INDUSTRIAL ZONING

There seems to be a more or less general impression that zoning in so far as it affects business and industry is negative—that it is merely a means of keeping business and industry out of residential sections. So pronounced is this view that the very word zoning has commonly come to mean "protection" for dwelling houses, and restriction" for stores and factories. This situation is most unfortunate for zoning when rightly understood can be made something as positive and helpful for business buildings as for non-business buildings.

That the relative competitive strength of a city in the domestic and foreign markets of the world is frequently conditioned to quite as great an extent by the arrangement of the industries within the city as by the availability of raw materials and the proximity of a consuming public is just beginning to dawn upon us. Economical means of transferring and distributing freight within a city contribute proportionately no less to the development and expansion of its commercial and industrial interland than efficient outside connections by rail and water. Heavy terminal costs are as much a drag upon a city's prosperity as high freight charges. Every cent saved in needless trucking means just that much more money available for the extension of the city's commercial and industrial radius by rail or water.

When factories and warehouses are not located with reference to freight terminals, a situation frequently develops where the downtown streets are unnecessarily congested to the inconvenience and financial loss of the whole city. A similar condition results where mutually interdependent industries locate in widely-separated parts of the city instead of near one another. It is maladjustments of this kind that zoning is designed to remedy.

If experts on transportation are correct in telling us that the movement of freight increases as the fourth power of the population, that the freight traffic doubles every time the population increases twenty per cent.—then, the street congestion experienced by our large cities of today is as nothing compared with what our larger cities of tomorrow will be obliged to endure. They will be compelled to adopt every possible means in order to keep traffic moving or choke under their own growth.

The purpose of this paper is, however, not to analyze the various evils from which our cities are suffering. That is the function of the economic and industrial survey. The object of this paper is

rather to consider the detailed method of formulating the zoning ordinance and of laying out the several business and factory districts than to dwell upon the necessity for zoning.

The simplicity or complexity of its classification will affect as no other factor the continued success of a plan, for, after all, zoning is almost entirely a matter of classification. If the classification is vague, ambiguous or needlessly involved, it is apt to prejudice the operation of the whole plan.

These facts do not seem to be generally appreciated. Some cities appear to think that the prime requisite in a good zoning scheme is elasticity. A certain amount of elasticity is, of course, wanted, but not at the expense of simplicity. The Minneapolis and Berkeley ordinance are both illustrations of instances where extreme consideration has been paid to elasticity. The Minneapolis ordinance subdivides trades and industries into sixteen different classes; the Berkeley ordinance into twenty different classes. Taken in all their possible combinations the building classes of the Minneapolis ordinance would permit of 241 separate and distinct kinds of industrial use districts! The Berkeley ordinance would permit of 381 separate and distinct kinds of use districts! Such elasticity is bound to develop into a situation where ultimately each district will be just a little different from every other district with the consequence that nobody will know what is allowed or disallowed in any district.

It may be urged that it is very unlikely that all of these combinations will ever be taken advantage of. This may be true, but their very possibility will lead to the development of unnecessary complications. That such minute refinements in the classification are bound to prove irksome, if not unworkable in practice, is evidenced by the fact that Berkeley after less than two years' experience under its zoning ordinance is now contemplating its radical amendment by reducing the classes of industrial use districts to a maximum of five.

The classification is the substance of every district—the district merely bounds the classification. Once accepted, therefore, a classification almost must be continued as any vital modification in its provisions would practically necessitate a general rearrangement of the districts.

Although a zoning ordinance should have a simple classification, it should not sacrifice needed protection for simplicity. This seems to be the main characteristic of the Alameda and Los Angeles or-

dinances. These ordinances provide only two classes of districts. In the residence districts, the businesses not especially excluded are permitted; in the industrial districts all kinds of business and industry are unrestrained. Neither of these ordinances protects residence streets from stores, nor business streets from large factories or nuisance uses.

The New York resolution in establishing three classes of districts supplies both of these omissions. The residential districts exclude all kinds of business and industry; the business districts, all kinds of large manufacturing establishments and nuisances. But the New York classification is weak in one respect—it does not afford sufficient protection to manufacturing. If a factory requires more than 25 per cent. of the floor area in a building, or a floor area in excess of the lot area, whichever is the greater, it is forced into the unrestricted district containing all kinds of nuisances.

To put manufacturing establishments and nuisance uses into the same classification thus is apt to produce many unhappy compromises, as every unrestricted district will be the result more or less of a balance struck, on the one hand, between the just claims of the district for factory development and, on the other hand, the protection demanded by neighboring residence and business districts against nuisances. In some cases nuisances will be allowed where they will do great harm, for no better reason than that the locality is naturally a manufacturing district; in other cases, factories will be prohibited on the ground not that their admission is undesirable, but because the nuisances that might slip into the district with them would prove a serious menace to adjoining districts. The proposed Philadelphia and St. Louis ordinances in creating four classes of districts—residence, business, manufacturing and nuisance—are in this respect a distinct improvement over the New York resolution.

A special feature of the Berkeley ordinance, and of the proposed Fresno ordinance, is the exclusion of residences from the heavy manufacturing districts and the nuisance districts. This plan has many distinct merits. The very reasons that make it desirable to exclude factories and nuisances from residence districts apply with equal, if not greater, force when it comes to prohibiting the erection of new dwellings in districts set aside for industrial development. If it is unhealthful for people to live near a factory isolated in the residence district, it is all the more unhealthful for them to live in a home isolated in the industrial district. To permit residence buildings

(Continued on Page 689.)

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FLOORING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Water Supply, Sewerage and Drainage System, Spec. 3676, U. S. Naval Hospital, Twenty-fourth and Gray's Ferry Road, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Cast iron, galvanized iron and terra cotta pipe, etc. Owners taking bids, due December 23rd at 11 A. M. F. J. Boas, 201 North Broad street; Wm. Steele & Sons Co., Sixteenth and Parkway; the Ryan Const. Co., Thirty-third and Gray's Ferry Road, are figuring.

Ham Cooking Room, Ninth and Noble sts., Philadelphia. Architect, private plans. Owners, Swift & Co., Ninth and Girard avenue, Philadelphia. Interior alterations, vitrified brick, plumbing, tile roof, millwork. Owners taking bids, due December 18th. E. E. Hollenback, Inc., 1804 Brandywine street, is figuring.

Retaining Wall, 4901 Stenton avenue, #450. Architect, private plans. Owners, Leeds & Northrup Co., on premises. Stone, 100 feet long. Owner will build.

Fire House, Police Station, Boiler House and Stable, Twenty-fourth and Ritner streets, Philadelphia. Architect, Philip H. Johnson, Presser Building, Philadelphia. Owners, City of Philadelphia, Department of Public Safety, City Hall. Brick and concrete, limestone and granite and terra cotta, fireproof. Police Station, 21½ stories and basement, 109x46 feet and wing 52½x46 feet; Fire Station, 2½ stories, 46x52½ feet, wing 46x103 feet; Boiler House and Stable, 1 story, 96x98 feet, stone foundations, slate roof, cork brick, terrazzo, marble, tile, granolithic and wood block and wood floors (electric lighting, steam heating and plumbing reserved), marble and terrazzo work, rolled steel sash and skylights, steel doors, metal lockers, iron stairs, ornamental iron work, hollow tile, metal lath, safety treads, metal window guards, metal weatherstrips, waterproofing, dampproofing, wire work, screens. Architect taking bids, due December 27th. John M. Yardley, 1716 Sansom street; W. W. Arstine Co., 1215 Filbert street; Wm. Linker Co., 831 Cherry street; Ketcham & McQuade, 1029 Brown street; Standard Const. Co., 1713 Sansom street; Frank G. Stewart, 1619 Sansom street; Mitchell Bros., 2125 Race street; Hogg Const. Co., 1634 Sansom street; Wm. Steele & Sons Co., Sixteenth and Parkway; F. W. Mark Const. Co., Finance Building, and Melody & Keating, 1322 Race street, are figuring.

Store Building (alts.), 1308 Chestnut street, Philadelphia, \$50,000. Architect, David B. Bassett, Perry Building, Philadelphia. Owner, George Miller, care of F. A. North Company, 1306 Chestnut street. Lessees, A. H. Geuting Co., 1230 Market street, Philadelphia. Interior and exterior alterations, new front, new floors, interior fixtures. Plans in progress. Too early for details.

Cafeteria (alts.), 38 North Eleventh street,

Philadelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owners, Waist Makers' Union, care of architects. Interior alterations to cafeteria, carpentry, electrical work, kitchen equipment. Architects taking general and sub-bids. W. O. Springer, 1624 Latimer street, is figuring.

Office and Exhibition Building (alts. and add.), 1318 Vine street. Architect, Paul J. Henon, Jr., Fuller Building, Philadelphia. Owners, Select Film Corp, 1335 Vine street, Philadelphia. Brick, cement work, fireproof, steam heating, electric lighting, tile and marble work, tile and composition floors, ornamental iron work. Architect has received bids.

Shop and Dwelling, 1209 Federal street, Philadelphia, \$1,000. Architect, private plans. Owner, Edward Luiggi, on premises. Brick, 2 stories, 15x34 feet, general interior alterations, slag roof. Owner will build.

Sublining, northeast corner Bermuda and Margaret street, Philadelphia, \$6,000. Architect, private plans. Owners, Barrett Manufacturing Co., on premises. Shed, frame, open, 1 story, 55x42 feet and 40x42 feet. Owners will build.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Service Club (alts. and add.), 207 South Twenty-second street, Philadelphia, \$3,775. Architect, private plans. Owners, United Service Club, on premises. Brick, 1 story, 17x83 feet, slag roof. Contract awarded to Coneen Const. Co., 1737 Filbert street.

Dwellings (2), west side of Bensalem avenue, south of Red Lion Road, \$3,600. Architect, private plans. Owner, J. B. Miller, Bustleton, Pa. Frame, 3 stories, 16x40 feet and 12x7 feet, asbestos roof. Contract awarded to C. H. Weiss, 9512 Bustleton avenue.

Stable and Shed, Bensalem Pike, south of Red Lion Road, \$2,000. Architect, private plans. Owner, J. B. Miller, Bustleton, Pa. Frame, 2 stories, 16x28 feet and 1 story, 16x36 feet. Contract awarded to C. H. Weiss, 9512 Bustleton Pike.

Store and Dwelling (alts.), 3518 Market street, \$1,400. Architect, private plans. Owners, Nathan Stein, 3404 Market street, Philadelphia. Flush bulk, interior alterations. Contract awarded to Samuel Kohn, 4008 Poplar street.

Garage, Rhawn street and Torresdale avenue, \$1,200. Architect, private plans. Owners, American Manganese Bronze Co., Holmesburg, Phila. Frame, 1 story, 23x32 feet, rubberoid

Residence (int. alts.), 1933 Spruce street, Philadelphia. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, Mrs. Lewis Brinton, 1933 Spruce street, Philadelphia. Changing stairways, partitions, hardwood floors, carpenter work, millwork, papering. Plans in progress.

Residence, Indiana avenue and Croskey street, Philadelphia. Architects, Wm. Steele & Sons, Sixteenth and Parkway, Philadelphia. Owner, Miss Sally Green, 69 Queen street, Germantown. Brick, 2 stories, 38x23 feet, slag roof, stone foundations, electric lighting. Architects have received bids.

Bank (alts.), South street, Philadelphia. Architect, Frank E. Hahn, 1112 Chestnut street, Philadelphia. Owners, People's Bank, Seventh and Girard avenue, Philadelphia. Changing building for bank purposes. Plans in progress. Too early for details.

Apartment House, North Broad street, Philadelphia. Architects, Henry L. Reinhold, Jr., and Ralph A. Land, associated, 1309 Walnut street, Philadelphia. Brick, 4 stories, 40x100 feet, slag roof, maple floors, heating, electric lighting, tile work, passenger elevator, mill construction. Plans completed. Architects ready for sub-bids December 18.

roof, cement floor. Contract awarded to E. T. Bender, 6014 Torresdale avenue.

Tank Support (30,000 gallons capacity), Forty-ninth and Market streets, \$1,000. Architect, private plans. Owners, Chilton Company, on premises. Contract awarded to A. H. Spenard, 822 Wood street.

Service Quarters and Mess Hall, Spec. 3598, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Wood and concrete, 1 story, 200x41 feet, ready roof, concrete foundations, cement and wood floors, electric lighting, kitchen equipment. Contract awarded to Wark & Co., 1737 Filbert street, \$43,500, 90 days.

Shed, Thirty-seventh and Tasker streets, Philadelphia, \$3,200. Architect, private plans. Owners, Nitrogenous Chemical Co., on premises. Frame, 1 story, 163x32 feet, ready roofing. Contract awarded to Hogg Const. Co., 1634 Sansom street, Philadelphia.

Coal Pocket, Whitty avenue and Fifty-second street, \$3,500. Architect, private plans. Owners, Atlantic Fuel Co., Fifty-second and Whitty avenue, Philadelphia. Timber, 30x124

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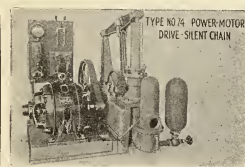
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Pennsylvania Building, Phila.

feet. Contract awarded to Fanning Eng. Co., 502 Ruseomb street.

Garage, north side of Hancock street, east of Allegheny avenue, \$1,500. Architect, private plans. Owners, French Drying and Finishing Co., 1201 Allegheny avenue. Brick, 1 story, 16x20½ feet, slag roof, cement floor. Contract awarded to C. West & Co., Inc., Oxford avenue and Wakeling street, Philadelphia.

Factory, 1508-14 North Mascher street, Philadelphia, \$8,000. Architect, private plans. Owner, Fred H. Miller, 3518 Lancaster avenue, Philadelphia. Brick, 3 stories, 56 and 43x49 feet and 68x26 feet, slag roof. Contract awarded to John E. Kearney, 327 North Fifty-third street.

Store and Office, 212-14 South Tenth street, Philadelphia, \$1,800. Architect, private plans. Owners, Horn & Hardart Baking Co., 214 S. Tenth street, Philadelphia. Brick, second story, 16x34 feet. Contract awarded to Harry R. Rust, 19 South Eighth street, Philadelphia.

Dye House (alts.), northwest corner of Shurs Lane and Lauriston street, \$1,000. Architect, private plans. Owners, Freeland Manufacturing Co., on premises. Tearing down frame wall and replacing with 13-inch brick

wall, 36 feet long, 10 feet to 18 feet high. Contract awarded to Wm. H. Eddleman & Sons, 453 Green Lane, Roxborough, Philadelphia.

Coal Storage, northeast corner of Twentieth and Indiana avenue, \$800. Architect, private plans. Owners, Priehofer Baking Co., on premises, New slag roof, general repairs. Contract awarded to P. Halbach Cont. Co., Twenty-sixth and Thompson streets.

Residence (add.), 354 South Thirteenth st., Philadelphia, \$1,500. Architect, private plans. Owner, Rev. N. F. Fisher, care of St. John's Rectory, 21 South Thirteenth street. Second story addition, brick, 14x8 feet. Contract awarded to Conneen Const. Co., 1737 Filbert street.

Factory (add.), 2305-07 North Eighth st., \$12,000. Architects, Wm. F. Koelle & Co., Twenty-sixth and Oxford streets, Philadelphia. Owners, Patrick Carr & Son, on premises. Brick, 4 stories, 20x53 feet, slag roof. Contract awarded to Wm. F. Koelle & Co., Twenty-sixth and Oxford streets.

Store and Dwelling (add.), 3251 Chatham street, \$3,000. Architect, private plans. Owner, Joseph Parish, on premises. Brick, 1 story, 18x14 feet, slag roof. Contract awarded to Samuel Katz, 616 Morris street, Philadelphia.

som street; R. C. Ballinger Co., 218 N. Thirteenth street; H. H. Wehmeyer, 509 W. Cumberland street, Philadelphia, are figuring.

State Sanitariums (adds.), Mont Alto, Crescon, and Hamburg, Pa. Architects, Harris & Richards, Drexel Building, Philadelphia. Owners, State of Pennsylvania, Department of Health and Charities, care of Dr. D. F. Royer, Commissioner, 1900 Race street. Plans nearing completion. Owners will advertise for bids in about one week.

PERSONAL NOTES.

Simon & Bassett, architects, 249 South Juniper street, Philadelphia, have dissolved partnership. David B. Bassett has opened offices in the Perry Building, Philadelphia, where he will continue the practice of architecture. Edward P. Simon has formed a partnership with his brother, Grant Simon, and will practice architecture under the name of Simon & Simon, 249 South Juniper street, Philadelphia, Pa.

Proposals

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INVITATION FOR PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., December 5, 1918.—Sealed proposals will be opened in this office at 3 P. M., December 30, 1918, for construction of Female Nurses' Quarters for the United States Marine Hospital at New York, N. Y. (Stapleton). Drawings and specifications may be obtained from the Supervising Chief Engineer Room 731, United States Custom House, New York, N. Y., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

PENNSYLVANIA

Construction News

Post Office, McKees Rock, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Supervising Architect, Washington, D. C. Brick, steel, reinforced concrete and granite, 1 story, basement and mezzanine, 72x58 feet, composition roof, concrete and yellow pine floors, steam heating, electric lighting, marble and slate work, metal lath, safety treads, metal weatherstrips, kalamein doors, damp-proofing, ornamental iron work. Owners taking bids, due January 14th. Wills-Ludwick Co., 1706 Sanson street, is figuring.

Exchange (alts. and add.), McKeesport, Pa. Architect, John T. Windrim, Commonwealth Building, Philadelphia. Owners, Bell Tele-

phone Co., Seventeenth and Arch streets, Philadelphia. General alterations and additions. Owners taking bids.

Post Office, State College, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Supervising Architect, Treasury Department, Washington, D. C. Brick, steel and reinforced concrete, granite and limestone, 1 story, 56x80 feet, composition roof, concrete foundations, steam heating, electric lighting, marble and slate work, kalamein doors, iron stairs, cement and wood floors, hollow tile, metal lath, metal weatherstrips, waterproofing, damp-proofing. Owners taking bids, due January 9th. Wills-Ludwick Co., 1706 San-

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New Jersey Construction News

Theatre (alts.), Atlantic City, N. J., \$25,000. Architects, Hoffman Co., Finance Building, Philadelphia. Owners, Globe Theatre Co., Atlantic City, N. J. Consists of ornamental plastering, cement floors, marble work, metal work. Contract awarded to P. M. Sax, Franklin Bank Building, Philadelphia.

Naval Station, Spec. 3686, Cape May, N. J. Architect, private plans. Owners, U. S. Government, care of Commandant of the Naval District, Twelfth and Chestnut streets, Philadelphia. Frame and concrete, 1 story. Photograph Laboratory, 50x25 feet; Machine Shop, 50x100 feet; Store House, 35x100 feet; Armory and Work Shop, 30x60 feet; Seaplane Hangar, 110x160x32 feet, new and remodeled Hangar, concrete platform, concrete foundations, steam heating, electric lighting, roof ventilators, gasoline storage system, built-up and slate surfaced asphalt shingle roof. Owners taking bids, due December 30th at 11 A. M. M. H. McCloskey, Jr., 1620 Thompson street; Wm. Steele & Sons, Sixteenth and Parkway; Geo. F. Pawling Co., 1432 South Penn Square, Philadelphia, and W. Beaumont, Atlantic City, N. J., additional bidders.

College Building, State and Carroll streets, Trenton, N. J. Architect, Wm. Slack, St. Regis Theatre Building, Trenton, N. J. Owners, Rider-Moore & Stewart School, Trenton, N. J. Brick, stone, steel and concrete, 4 stories, 60x100 feet. Plans in progress.

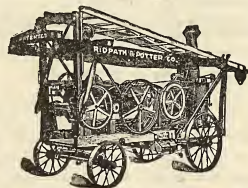
Comfort Station (alts.), Warren street, Trenton, N. J., \$20,000. Architect, J. O. Hunt, 114 North Montgomery street, Trenton, N. J. Owners, City of Trenton, Capitol Building, Trenton, N. J. Alterations, plumbing. Sketches being drawn.

Publishing Building (alts.), Stockton street, Trenton, N. J. Architect, Wm. Klemann, Commonwealth Building, Trenton, N. J. Owner, Trenton Evening Times, Stockton street, Trenton, N. J. Brick, interior alterations. Plans in progress.

Residence (remodeling), Forked River, N. J. Architect, F. H. Bent, Capitol Building, Trenton, N. J. Owners, Fish and Game Commission, State House, Trenton, N. J. Brick and concrete, 1 story, 53x20 feet and 13x25 feet, steam heating, electric lighting, concrete foundations, tile roof, hardwood floors. Plans in progress.

Miscellaneous Construction News

Hotel, Canton, Ohio. Architects, Price & McLanahan, Bellevue Court Building, Philadelphia. Owners, Pennsylvania R. R. Co., Pittsburgh, Pa. (Lines west of Pittsburgh). Brick, fireproof, 3 stories, 360x32 feet, composition. Plans in progress. Too early for details.



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MARYLAND Construction News

Garage, 25 Summerset Road, Guilford, Md. Architect, Theo. Wells Pietsch, American Building, Baltimore. Owner, Howard Hubbard, American Building, Baltimore, Md. Brick, 2 stories, slate and tin roof, hot water heating, electric lighting, hollow metal skylights, ventilators, composition floors. Architects taking bids, due December 23rd. W. E. Harn, 2314 Oak street; Gladfelter & Chambers, Thirty-sixth and Roland avenue; John S. Busiek, 2500 Guilford avenue, and John F. Kunkel, 29 Sherwood avenue, are figuring.

Dispensary, Indian Head, Md., Spec. 3588 Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Brick, shingle roof, concrete work, heating, electric lighting and plumbing. Owners taking bids, due December 23rd. DeKimpe Const. Co., Uniontown, N. J., is figuring.

General Store Building, Annapolis, Md. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Reinforced concrete, brick and frame, 3 stories, granite trim, slag roof, steam heating, electric lighting, ornamental iron

work, electric elevators, hollow metal skylights, rolled steel sash, ventilators, fireproofing, dampproofing, hollow tile, tile and terrazzo, dumbwaiters, plumbing. Lowest bidder, James L. Marshall, Tenth and G streets, Washington, D. C.

Dwellings (7), Greenway avenue, near Southway, Baltimore, Md., \$18,000. Architect, J. C. Spedden, 2715 Harlem avenue, Baltimore. Owner, H. Webster Cooke, Law Building, Baltimore. Brick, 2 stories, 24x40 feet, tin or slag roof, hot air heating, electric lighting, skylights, plastering, plumbing. Owner taking sub-bids.

Dwellings (7), 1206-18 Longwood street, Baltimore, Md., \$19,500. Architect, George Dessel, Baltimore, Md. Owner, J. Hurst Purnell, 32 Roland avenue, Baltimore, Md. Brick, 2 stories, 21x35 feet, tin or slag roof, hot air heating, skylights, ventilators, plastering and plumbing. Owner is taking sub-bids.

Warehouse, 1302-04 North Calvert street, Baltimore, Md., \$12,000. Architect, Clyde N. Friz, Munsey Building, Baltimore. Owners, Hartman & Ridgeway, on premises. Brick, 1 story, 75x117 feet, slag roof, electric lighting, plumbing. Contract awarded to John F. Kunkel, 29 Sherwood avenue.

PERMITS FOR Alterations and Additions

O is the abbreviation for owner. C is for contractor.

Philadelphia

Dye House, northwest corner of Shurs Lane and Lauriston street, \$1,000. Freeland Manufacturing Co. (O), on premises. Wm. H. Edelman & Sons (C), 453 Green Lane, Philadelphia. Brick, tearing down frame wall, replace with brick wall, 13 inches thick, 36 feet long to 10 feet to 18 feet high.

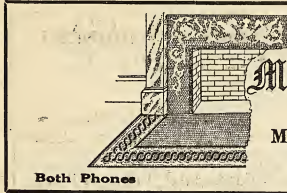
Store and Office, 212-14 South Tenth street,

\$1,800. Horn & Hardart Co. (O), on premises. Harry R. Rust (C), 19 South Eighth street. Brick, second story, 16x34 feet.

Coal Pocket, Fifty-second and Whitty avenue, \$3,500. Atlantic Fuel Co. (O), on premises. Fanning Eng. Co. (C), 502 Ruscomb st. Frame, 26 feet high, 30x124 feet.

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Milner, north of Bleigh street, \$5,000. Tacony Ordnance Co. (O), Tacony, Pa. Philadelphia Boiler Works (C), 1737 Filbert street. Steel, 1,119 feet high.

Mill Tank and Support, Coral and Adams streets, \$800. Wm. Arrett & Co. (O), on premises. Amos Hall & Son (C), Second and Cambria streets.

Store and Dwelling, northeast corner of Ninth and Tasker streets, \$600. Benj. Staller (O), on premises. Solomon Kravitz (C), 735 Morris street. Brick, 1 story, 10x10 feet, slag roof.

Manufacturing Building, 3336 Market st., \$23,000. Supple-Wills-Jones Co. (O), Twenty-sixth and Jefferson streets. Geo. Kessler Cont. Co. (C), Drexel Building. Brick and steel.

Dwelling, Bustleton Pike and Somerton Road, south of County Line, \$5,000. D. Brewer & Gehley (O), 1724 North Eighteenth street. Frame, 3 stories, 18x44 feet, slate roof, hot air heating.

Shelter Shed, 4601 north Sixteenth street, \$800. Stenton Park Dairies (O), on premises. John W. DeFrehm (C), 1935 Ranstead street. Frame, 1 story, 30x59 feet.

Garage, Hancock and East Allengrove st., \$1,500. French Dyeing and Finishing Co. (O), 1201 Allengrove street. C. West & Co., Inc. (C), Oxford avenue and Kakelin street. Brick, 1 story, 16x20½ feet.

Show Room, southwest corner of Twenty-fourth and South streets, \$500. Thornton Fuller & Auto Co. (O), on premises. Removing brick wall and replacing with plate glass windows. Bath House, 315 Monroe street, \$600. Anna Kratchman (O), 323 Monroe street. Abraham Kratchman (C), 315 Monroe street.

Open Shed, east side of Schuykill Road, south of Moore street, \$3,200. Nitrogenous Chemical Corp. (O), Thirty-seventh and Tasker streets. Hogg Const. Co. (C), 1634 Sansom street. Frame, 16x30 feet.

Fire House, 808 Morris street, \$2,465. City of Philadelphia (O), City Hall. Hogg Const. Co. (C), 1634 Sansom street.

Garage, 2615 West Hagert street, \$1,500. Lewis T. Hubbs (O), 3016 West Cumberland street. Ralph Wright (C), 3016 West Cumberland street. Steam heating.

Shop and Dwelling, 1209 Federal street, \$1,000. Edward Leigh (O), 1209 Federal street.

Brick, 2 stories, 15x34 feet, slag roof.

Changing Dwelling to Rooming House, 430-32 South Fortieth street, \$2,000. E. E. Bratton (O), 119 South Thirty-ninth street. Bratton & Co. (C), 430 South Fortieth street.

Brick, 3 stories, 15x9 feet, concrete slab roof. Dwelling, 354 South Thirtieth street, \$1,500. Rev. N. F. Fisher (O), 21 South Thirtieth street. Connecan Const. Co. (C), 1737 Filbert street. Second story addition, 15x18 feet.

Sublining, northeast corner of Bermuda and Margaret streets, \$6,000. Barrett Manufacturing Co. (O), on premises. Frame shed, open, 1 story, 55x42 feet and 40x42 feet.

Garage, 5970 Drexel Road, \$1,175. George B. Smitheman (O), on premises. Frank C. Graham (C), 2927 North Eighth street. Stone, 1 story, 25x27 feet, slate roof.

Garage, 347 East Wyoming avenue, \$525. Mrs. W. T. Will (O), on premises. B. Betel (C), 1354 Unity street. Brick, 1 story, 16x16 feet, slag roof.

Garage, 2865 Mutter street, \$600. Carl Braishoff (O), 2864 Mascher street. Wm. Marriott (C), 207 West Cambria street. Brick, 1 story, 9x15 feet.

Storm Doors, 931 South street. A. Wax & Son (O), 4218 Parkside avenue. Jos. Levan (C), 1402 South Second street.

Factory, 1912-14 South Water street, \$2,400. Charles Schlörer (O), Front and Mifflin sts. John Hausman (C), Third and Tasker streets. Brick, 2 stories, 30x40 feet, razing two buildings.

Store and Dwelling, 1627 South Tenth st., \$500. P. Copello (O), on premises. Brick, 1 story, 17½x13 feet.

Garage, 44 South Fifty-seventh street, \$900. Eli Merish (O), on premises. E. R. Sabon & Co. (C), Sixty-third and Walnut streets. Steam heating.

Dwellings (5), 2639-41-43-45 S. Second street, \$1,000. A. Berman (O), 2502 S. Second street. Mark Haller (C), 2123 South Fourth street.

Dwellings (2), Somerton Pike, south of County Line, \$8,500. D. Brewer Gehley (O), 1712 North Eighteenth street. Frame, 3 stories, 28x31 feet, asbestos shingle, slate roof, hot air heating.

Shop, 707-09 Reed street, \$700. R. Davis

(O), 704 Reed street. Brick, 2 stories, 16x25 feet.

Dwelling and Storage, Fifty-seventh and City Line, \$2,500. J. Marshall Gest (O), on premises. A. L. Fretz & Son (C), Reed Building. Alterations.

Store and Tenement, southeast corner of Sixteenth and Brown streets, \$1,550. Wayne B. Sweet (O), 1602 Fairmount avenue. Samuel J. Rea & Son (C), 1608 Fairmount avenue.

Bank, 415 Chestnut street, \$1,400. Philadelphia Trust Co. (O), on premises. Doyle & Co. (C), 1519 Sansom street. Floor over light wall, 15x34 feet, plastering.

Tool and Wood House, northwest corner of Norwood and Sunset avenue, \$1,550. Mrs. Susan N. Morris (O), on premises. J. P. Thompson (C), Real Estate Trust Building. Hollow tile, 1 story, 18x31 feet.

Garage, Wiota and Fairmount avenue, \$700. G. M. Sheber (O), Fortieth and Fairmount avenue. H. T. Hall (C), 2010 South Bancroft street. Brick, 1 story, 20x25 feet, slag roof.

Store, northwest corner of Thirteenth and Market streets, \$900. George B. Wilson Estate (O), Fifteenth and Chestnut streets. Basch & Co. (C), 1420 South Front street. Metal bay windows.

Factory and Storage, 236 North Third st., \$800. Cover & Co. (O), 242 North Third street. George Kessler Cont. Co. (C), Drexel Building. Cement floor.

Garage, 2830 Edgemont street, \$600. J. Koeh (O), 2648 East Cambria street. Brick, 1 story, 20x20 feet, slag roof.

Shop, southwest corner of Luzerne and D streets, \$750. J. Manelley (O), 309 Arch st. Borden & Bro. (C), 637 North Nineteenth st. New boiler and boiler pit, 8x12 feet, underpinning one wall.

Machine Shop, southwest corner Twenty-sixth and Sedgely avenue, \$500. Charles Diekmann (O), 2234 North Fifty-first street. Richard McLaughery (C), 2306 North Twenty-sixth street. Iron, 1 story, 12x25 feet.

Offices, Kensington and Cumberland street, \$750. F. R. T. (O), 810 Dauphin street.

Bakery, northeast corner of Fifty-seventh and Race streets, \$24,800. Quaker City Quality Cracker Co. (O), 4011 Baring street. David A. McClelland (C), 4011 Baring street. Brick, 3 stories, 45x80 feet, steam heating.

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INDUSTRIAL ZONING.

(Continued from Page 684.)

in factory districts, moreover, tends to increase the size of these districts beyond their natural requirements, as the area included in this classification must also make provision for the erection of a considerable number of dwellings.

Mixed buildings furnish the real reason for zoning. The success of zoning is to be judged to a very great degree by the completeness with which it segregates different kinds of buildings. This segregation cannot, of course, be perfected unless exclusion is applied to one class of buildings as well as another. But in considering the present advisability of excluding residences from industrial and nuisance districts, it may be well to recall that much which is even rudimentary in zoning has not as yet been sustained as constitutional by the courts. Until such vital parts of the zoning program as the exclusion of stores from residence streets have been favorably passed upon by the courts, the most deliberate caution should be exercised in extending the scope of the regulations.

How many classes of industrial districts is a question which cannot be settled by the application of theoretical principles. It must be decided after a careful examination of the facts in each case. The deciding factors will, however, most generally be: (1) the heterogeneity of the existing and prospective development; and (2) the degree to which different types of development have interpenetrated one another. A small homogeneous community may find it necessary to establish but one industrial district, an unrestricted district embracing all kinds of business and industry. More complex communities may, on the other hand, demand two, three, four or more classes of industrial districts. The number should, however, in every case be kept down to the smallest working minimum essential to the performance of the primary objects of the plan.

With a simple classification, no worthy object will be served by keeping down the number of districts. A multiplicity of districts is not something in itself to be discouraged provided the districts are well-selected. Indeed, several small districts may prove preferable to one large

one, as they can be made to conform more nearly to the existing or immediately prospective development as well as to promote a more uniform type of development. Industrial districts larger than the area demanded by the least restricted class of buildings in the district are apt to result in a very mixed development. The buildings belonging to the more restricted class would perhaps in most instances be better served if segregated by themselves. It is an open question, therefore, whether the general policy in drawing the district boundary lines should not be to limit the extent of the less restrictive classification, each in its turn, to the smallest practicable area.

The form which factory districts, as distinguished from business districts, should assume—whether they should be confined in the heart of the city, dispersed to the suburbs, segregated in concentric zones, laid out along lines radiating from the center, arranged in parallel districts bisecting the city, or indiscriminately scattered throughout—is one which has as yet not been satisfactorily answered. If one of these methods of distributing factories is more satisfactory than another, the fact has not been conclusively demonstrated. Such industrial surveys as are available do not enable one to say which type or types of districts produce the best results. It may well be that there is no most satisfactory method, that the most satisfactory method varies for different trades and industries and under different conditions, and that the most satisfactory method in one community is the least satisfactory method in another community.

Industrial zoning as applied to factories has often been advocated with a view to effecting a decentralization of population, it being supposed that a judicious distribution of factories would at the

same time prevent a piling up of the workers in congested tenements. If manufacturing were to be accommodated in the purlieus of the city—and this to a certain extent can be realized for only those industries which are engaged in manufacture for the local market need be near the business center—each establishment would no doubt in time become the center about which an increasing number of its operatives would seek to live, but this would not in itself solve the problem of land overcrowding. Without drastic regulations effectively limiting the number of families that could be housed per acre, it might only serve to create new congested centers, worse than the old, in the outskirts of the city. The way to limit congestion of population is to limit it and this, it seems increasingly clear, can only be done by prohibiting more than a given number of families from inhabiting a certain unite of ground.

To scatter the factories for no better reason than that many factories assembled at one place will require a large number of employees is to ignore some of the fundamental facts in the case as a decentralization of a city's industrial development does not necessarily mean a zoning of workers by place of work. In the first place, the different members of a workman's family work in different places. If the head of the family lives where he can walk to his work, will not his daughter who clerks in a department store, or his son who keeps books in a downtown office have to ride? In the second place, small industrial areas can be used intensively, especially when occupied by light manufacturing. In New York there are blocks improved with loft buildings accommodating more than 5,000 operatives.

Is not the answer to the dilemma that

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intensive industrial development is no excuse for a congestion of population, that a decentralization of population can go hand in hand with a concentration of industry? Factory centers like business centers must have convenient transportation. If there are many workmen employed in one place, it is not essential to louse them on the same area which a smaller number would inhabit more sparsely! Through the construction of transit lines the housing area can be enlarged to such an extent that each family will still live in good surroundings.

Action affecting changes in the districts or the classification should be taken only after a most deliberate examination of the facts. After a section has once been subject to certain restrictions a change in the regulations cannot be made without due regard to the effect that the ordinance has had upon the development of the locality. In time it will, of course, become increasingly more and more difficult to make changes of this character without violating the interests which have come into being on account of the plan. Here is a district where certain buildings have been erected which, but for the protection afforded by the regulations, would never have been constructed; there is a district where certain buildings have been prevented from being erected which, but for the restrictions imposed by the ordinance, would have been built. A change in the restric-

tions will leave neither of these districts in the position which they would have occupied but for the adoption of the law.

The shape, size, location and distribution of industrial districts, as well as their classification, must be determined, not by theory, but by a careful consideration of the concrete facts in each case. The presence of rail and water terminals, the size of the block and lot unit, the width and grade of streets, the character of the existing development, in fact, practically everything connected with the physical plan of a city have to be taken into consideration and thoroughly studied and analyzed in framing a constructive program for industrial growth. That such a program for future development is essential in every city cannot be questioned. For years the pecuniary losses suffered on account of unregulated building in certain sections of New York have not only equalled, but exceeded those suffered from fire. Investigation might show that this state of facts was true of the metropolis as a whole. The city that does not protect its citizens against fire is generally considered derelict in its sense of public duty. The same is rapidly becoming true of the city that does not protect its citizens against unregulated building.

—HERBERT S. SWAN, *In Architecture and Building.*

HOW THE BANKER CAN LEAD THE WAY IN THE PROBLEMS OF RECONSTRUCTION

The greatest American humorist-philosopher since Mark Twain said the other day that this country would tear up the pavement for the first of our boys to come home, and arrest the last contingent for vagrancy. That is a bit of exaggeration which has its excuse for utterance in the notoriously short memory of our people as a whole. Great deeds and grand events become fixed in the mind, but unless the individual responsible for those deeds and events be dead heroes or very conspicuously alive ones, they are soon forgotten. And the great mass of supporting common soldiery are out of mind almost before they enter our consciousness.

What is partly true of the returning men who dropped their tools of industry, who laid aside their pens and ledgers, who dropped the plow handles in the midst of an unfinished furrow to take

up the arms of war, is also largely true of men and classes of men who fought their share of the battles on this side of the water.

Take the banker; what set of men has done more valiant service during the last two years, asks Noble Foster Hoggson. But now that the war is over, these geniuses of finance seem almost to have been dropped from the reckoning.

Sociologists, professors of political science, labor leaders, politicians, diplomats and economists are very prominent with their solutions for the problems of reconstruction. Few, if any of them, accord the great bankers a high place in the affairs of this period. Yet no single class of men can and should play a more important part in the work of setting this country on its feet, declares Mr. Hoggson.

The banker, by precept, by example,

must show the way. He must take the initiative. For instance, improvements to vacant property, erection of new structures and building construction work in general, are planned to be in the forefront of post-war activities, in the opinion of Mr. Hoggson, who, as a builder, has made a careful study of the situation, and who, as a member of The American Industrial Commission to France, is well versed in the international ramifications of reconstruction problems.

Some one must take the lead, Mr. Hoggson points out. There will be enough,—too much, perhaps,—of the timid, pessimistic element which will want to "wait and see" before carrying out a proposed building operation. Therefore, if a bank has been struggling along, handling its business in cramped, antiquated, inadequate quarters, the directors can start the reconstruction movement into action by getting under way with their work at once. Not only should they have plans prepared and let the contract; they should give widest publicity to the fact that they are to have a new building. This publicity in the daily papers, in letters to investors, to other banks, folders to depositors and prospective depositors, would have the electrical effect of causing positive action on the part of other owners.

In practically every community, the bank reflects the prosperity and progressiveness of its locality, or the lack of those elements. Not alone in regard to investments is the banker looked to for guidance, but he is generally counted on to take the initiative in all civic improvements. Let a bank build a new business home; that is outward evidence of prosperity, and other owners will hearten and follow suit. If a bank, metaphorically, pulls a long face and defers improving its property, all the faint-hearted take their cue therefrom and wait for the bank to act first. Naturally, there follows depression instead of prosperity.

Secretary McAdoo is quoted as stating that construction work which has been delayed because of the necessities of war should be resumed immediately; that the resumption of construction work by the government will contribute toward facilitating the industrial transition of the country from a war to a peace basis, and should serve to encourage others to undertake without delay the fulfillment of the many and varied industrial peace needs of the country. A speedy return should therefore be made to construction, in the way of new build-

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ings or modernizing old ones, so as to encourage industry in general to make that transition, to say nothing of conserving the interest of labor, which is also involved.

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er the bankers will evidence their faith in the future of this broad land of ours.

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THE RELATION OF ESTIMATING TO BUSINESS POLICIES

By EDWIN L. SEABROOK.

Proper estimating methods and business success are so closely allied for the building contractor that the various ramifications of these may well be considered and their bearing upon the business emphasized. Estimating does not begin and end with the mere compilation of the various amounts making up a price. The policy of business management is really centered in the estimate, and these are reflected in the business-getting methods. Some of these may seem out of the ordinary, yet when closely examined it will be seen that they have developed into a well settled policy of the firm.

Great stress is laid by many writers—and estimators as well—upon the rapid turnover of capital invested. How much business can be done, how many times can the capital be "turned over," seems to be the desired aim. Three or four years ago the cost of conducting business, or overhead, began to increase. To meet this a campaign developed in some quarters for frequent turnovers. "Meet rising costs with quick turnovers" became the slogan. One great business magazine started a campaign to this effect and had a staff of speakers to present the cause to trade associations and organizations of retail merchants.

Many have taken the "turnover" too literally and estimated accordingly. They seem to think that overhead expense is entirely eliminated by this process. The percentage (but not the amount) of expense, it is true, may be lessened by frequent "turnover," but there is no benefit derived from this unless it earns the overhead and a profit. There is no greater fallacy than the belief that material and labor can be sold for less than these cost plus the overhead, in the ex-

pectation of making up the overhead by volume.

In a large middle west city, a stationery house contracted to supply a big public service corporation with lead pencils for the invoice price plus 10 per cent. The amount of business was large and the stationery firm reasoned that this 10 per cent. was all "velvet"; all overhead was eliminated when the goods were bought and delivered immediately to the purchaser. The firm installed a very complete cost-finding system. To their surprise they found that the public service corporation lead pencil business was done at a loss and they gave it up.

In the haste to turn over capital—by taking contracts—many try to put over some big sale (contract) without any overhead, throwing this burden on the balance of the business, and think the difference between actual cost and price received is velvet or profit. If the building contractor secures one hundred contracts a year and makes a fair profit on sixty, have the contracts (volume or capital turnover, on the other forty benefited him or not?

If the overhead expense as developed by some trade organizations in the building line is 20 per cent. (or more) of labor and material, it is quite evident that this percentage must be added to *all* the contracts. If a portion of the business is taken on a smaller percentage, then a larger percentage must be added to the remaining portion. If anyone feels he must do this "no profit" business, let him be honest about it. Open an account with it in the ledger. Call it "No overhead" or "No profit," or whatever you please; but at the end of the year, when the overhead is computed, let it be on

the amount of business that is charged with it, but do not include the "velvet" or "non-overhead" amount.

No matter how rapidly the capital of the building contractor revolves, or turns over, the overhead expense must get into it before there is any profit. If this rapid revolving is carefully analyzed it will be found that the overhead is not reduced so much as is often believed. The amount of business, or contracts, does not reduce the overhead, and it is useless to strive for rapid turnovers unless a little of the transaction adheres to the bank account in the form of profit.

The turnover of capital and business expansion are related. It is a most natural ambition to see the business grow larger every year; no one wants to stand still. Expansion may be profitable or unprofitable. No business should grow faster than the ability to handle it effectively develops in the owner. Expansion is profitable only as the growth is substantial and fits in with many other controlling factors. Many catering to the ambition of expansion have crippled themselves and retarded the development of the business for a long time.

The record of one firm, covering a period of six years, shows the fluctuating results of expansion without due regard to the factors that controlled the business. In one year this firm did a gross business of \$54,000 and made a profit of nearly 10 per cent. or \$5,000. The next year the expansion idea took hold of it and the business amounted to \$72,000, with a profit of \$3,900, or a little over 5 per cent. The third year the contracts amounted to \$130,000, showing a profit of about \$10,000, or a little less than 8 per cent.

In the same city there were five other firms competing for the business. The expansion of the sixth firm was out of all proportion to the natural increase of business in the community; consequently the amount of business secured by the other five firms began to contract. In order to get their share of the work these firms began to cut into the price. The expanding firm wanted all the business it could get, so it cut the price also. This trade war brought the business of the expanding firm the fourth year to about \$99,000, with a profit of something like \$1,800, or less than 2 per cent. This was getting perilously near the danger line. The business for the fifth year was \$84,000 with a profit of less than 3 per cent., or \$2,300. The business for the sixth year was \$71,000, profit over \$3,000, or about 4 per cent.

The average profit for the five years.

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of experimental expansion was \$4,200. The experimenters demoralized the business for themselves and their competitors for months to come. How different it was to get back to the old standard need not be told. This expansion was undertaken on the theory that a large business could be done on a small margin, thus reducing the expense; the more business, the less expense, the greater profit. Unfortunately, the results did not bear out the anticipation. Expanding beyond the natural increase of business in the community forced it to be taken at a less profit than formerly.

Expansion is profitable only when all other factors expand accordingly:—ability to take care of the business, equipment, finance, expense, profit. The conservative estimator will take all these into consideration in making up the estimate.

Does it pay the building contractor to take contracts on a percentage basis? This depends on how well equipped the firm is to handle contracts of this nature, and the size of the percentage. The firm with an expense of 23 per cent. on labor and material is not equipped to handle work for 15 per cent., nor 20 per cent., on the bare cost of these.

Percentage basis contracting is done by many building firms on a large scale. These are equipped to handle the work in this way at a profit. If this class of work is not done exclusively it will be found that it carries its proportion of expense. If it requires a certain percentage to cover overhead expense on labor and material, which the building contractor furnishes himself, a lesser percentage will not carry the contract through when these are not furnished, or it is erected on a percentage basis. The percentage contract demands supervision, book-keeping, liability insurance, wear and tear of equipment, which must be paid for by the one performing the contract. This class of contracts is often taken on the theory that volume of business lowers the expense. Such contracts do not decrease the amount of expense; they may lower the percentage of expense. The amount of expense and percentage of expense of conducting business, or overhead, are two different things. The amount of this expense may be increased and at the same time the percentage decreased. This procedure, however, does not necessarily produce any more profit. It is better for the ordinary firm to adhere to one method in its contracting business. A percentage basis will be found profitable only when its just share of the overhead expense is included.

How deceptive it is not to distinguish between the amount and percentage of overhead expense is well illustrated by a metal roofing firm in one of the largest cities of New England. This firm did a large amount of all kinds of roofing. It was decided to take on other branches of sheet metal work, such as cornices, skylight, etc. A short time after this expansion took place a member of the firm said to the writer: "We regard our sheet metal work as a by-product. Our roofing part of the business bears all the overhead expense. Cornices, skylights and work of this nature goes in the estimate at cost." The firm was increasing the volume of its business, but did not realize that its overhead expense was being increased accordingly. It was estimating on the theory that its overhead expense would remain stationary, be borne by the former part of its trade—roofing—and that by combining the other sheet metal work on the building at cost with that of the roofing, it could land the contract. Doubtless there are many building contractors who have reasoned along the same lines and estimated according to this reasoning. It is not possible to materially increase the business without increasing the overhead expense.

There are cases almost without number where the mechanic in jobbing uses very little or no material. If these jobs are considered individually, they will be done at a loss unless the overhead expense is applied on productive labor.

If the average expense of the contractor is 27 per cent. of the cost of labor and material combined, it is quite evident that the percentage of overhead, if placed on productive labor alone, must be much higher. In the analysis of the business in the March issue of *The National Builder*, shown in this series, the relation of expense to productive labor was 49 per cent. In other words, where a dollar was paid to a mechanic, 49 cents was paid out for overhead expense. Using this as a basis to determine the cost per hour, for the mechanic, where no material is used, we would have, assuming the mechanic is paid 60 cents per hour:

Wages of mechanic	\$0.60
Expense, 49 per cent.	.29 2/5
Cost	\$0.89 2/5

From this it is quite evident that the cost of the mechanic to the business is practically \$.90 per hour, and any profit from his work must be in addition to this.

Is it good business policy in slack times for the contractor to take work on small margins in order to keep the business

moving and help pay the running expense?

This is by no means an uncommon practice, but there is an element of danger in its too frequent use. The extent to which this can be done depends upon a knowledge of how much low profit work can be taken without disturbing the harmony of the business. Unfortunately the busy time does not necessarily come to all at the same time. Generally some one is dull all the time. If this practice of taking work in slack seasons at low margins should be general, one or more in the community would be estimating low all the time. Unquestionably such a practice, if it should become general, would have a tendency to lower the standard of the bidder and his competitor. There may be times when the practice is justifiable, but the danger lies in the forming of a low bidding habit. It is not easy to go from a low to a high estimating policy in a single leap. It is always easier to find excuses for estimating low than high. It is much safer to create the habit of not taking work unless the overhead expense is covered and a small profit in addition.

What is profit? Economists tell us that it is payment for the assumption of risk of the capital supplied to operate the business. Nearly everyone else considers it as excess of return over expenditures in a given transaction, or series of transactions. In other words, it is the residue, amount left over, earnings, or gain. Strange as it may seem, the amount of profit sought is more generally applied on the definition of the economist, the risk involved in the transaction, than on a certain percentage of gain on all the transactions, although few estimators realize that this is so.—*National Builder*.

Brick is the most common kind of building material in Saloniki and in all New Greece, says United States Consul General George Horton, Saloniki, in a recent report. Wooden structures are rare, on account of the shortage of timber. Stone is little used, except for underground walls and foundations. Ordinary walls are built with both plain and hollow bricks.

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Surplus	-	-	8,317,502.26

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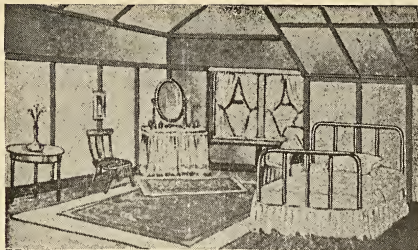
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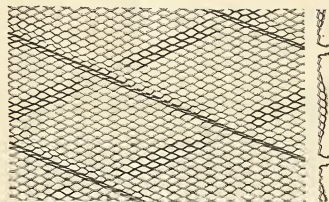
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BUILDERS' GUIDE

Devoted to the Advancement of American Architecture, Structural
Engineering and the Building Trades

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As The Editor Sees It



IS it possible that the benefits derived from proper housing conditions, brought before us so forcibly by the war, can be soon forgotten? Yet Noble Foster Hoggson, President of Hoggson Brothers, Builders, New York, reminds us that we must not ignore the warnings of the conflict from which we are just emerging and says:

There are two great movements, almost so closely related as to be one, either or both of which threatens this country. One is economic; the other social. The first is called retrenchment; the second Bolshevism.

To the extent that the continued spending of money for materials or waging war is concerned, now that it is won, the move for economy is well directed. But in carrying this project to the intended limit we would at the same time be destroying some of the great social betterments, the possibilities of which the war has brought to us. And by taking away privileges, rights, and benefits which mankind has gained through bloodshed we may, unwittingly, perhaps, be producing an excuse for Bolshevism.

One rarely hears of workmen receiving "a fair day's wage for a fair day's work," who have the means to provide for their families in the way of homes, clothes, food, education and recreation, leaning to Bolshevism or the doctrine of excesses which gains its title from that word. A contented workman who receives even approximately a fair return

on his labor strives for bettering the whole social condition rather than destroying one social structure in order to set up another.

A man holds his home sacred above all things. Take his home away—or the right to create a home—and you will produce wanderers living under conditions not fit for animals; such conditions we have witnessed in our own Northwest. The result is new members for the I. W. W.—incipient Bolshevists.

The war provided the greatest impetus to the movement for decent homes for employees. Under governmental auspices and direction, and with government money, plants engaged in war work undertook to create villages designed along model lines to house their workmen, and so reduce shifting of labor from place to place and cut down the cost of labor turnover.

Our housing scheme developed during the war was not perfect; it was adapted to the occasion. Perhaps many of the newly created villages will soon be only a memory. But to ignore our housing needs in our future calculations will be no less than a calamity.

It is said that certain manufacturers believe labor will soon be so plentiful that it will occasion no trouble at all to get men for jobs of all sorts at whatever wage is offered, and without the present consideration of housing accommodations. If this belief represents any considerable or important element of em-

ployers, it means that one of the principles for which this war was fought has not penetrated their consciousness. The consensus of opinion of the delegates to the convention held at Atlantic City last week—this convention bringing together the most important industries of the country—was that labor would be scarce and not over-plentiful, excepting temporarily in the districts where war work was being done. This congestion would be relieved almost immediately by the surplus returning to their vocations in their home localities. Employers who, with selfish thoughts only, expect to thus take advantage of a possible over-supply of labor, are short visioned and harmful to the successful solution of the future social state.

We must take care of housing our employees; we must provide homes for them. It is our duty to raise the standard of living. If there are class distinctions in this country, the best way to obliterate them in to co-operate with the workers, the great producing class, to assist them in becoming even more useful to themselves and to the country by evincing an understanding of their hopes, desires and aspirations. That will require, first of all, sympathetic co-operation, and, second, a comprehensive plan of education. The most important step in the matter of education begins with the home. Improve living conditions; make homes things of comfort and attraction. The close of the war has not

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lessened the importance of housing; it has intensified it. Instead of dropping our housing plans we should greatly elaborate them. Peace industry requires the proper housing of workmen as well as did war industry.

At present there is apparently no comprehensive scheme backed by our government to assist and co-operate with industrial manufacturers and other agencies to begin new peace-time housing developments. It would seem that such a scheme is necessary and would require not only governmental aid in financing, but governmental direction and supervision.

In his peace-time plan, Lloyd George of England has included the problem of housing and has given it a place of initial importance. One of the reasons for this is, that England recognizes and expects to meet the grave employment situation. Yet Lloyd George is only following out a specific recommendation adopted in 1916 by the Joint Committee on Labor Problems After the War, which calls for the erection of "1,000,000 new dwellings," and states that "the 1,000,000 new dwellings" should be begun *the day after peace is declared*, but should be proceeded with, month by month, strictly in correspondence with the supply of building trades workmen, so as to leave practically none of them at any time unemployed.

Some recognized body, and preferably the government, should take immediate action on the problem of industrial housing in this country. The two urgent reasons are, first, the necessity of raising the standard of living of the workmen and providing a decent place for them to live in and raise a family; second, the necessity of affording employment to the mechanics from the demobilized army and from munition plants. The solution of this problem will do more to counteract social unrest and the threat of Bolshevism than anything else.

* * *

WE feel confident that "good housing" is here to stay—from every quarter comes assent to Mr. Hoggson's views. At the recent conference on "Housing in America" held in Boston, labor in America included good housing in its program of the future, just as British labor has done in the past. From the recent conference at Atlantic City comes the view of Mr. Ernest Trigg, President, Philadelphia Chamber of Commerce:

"I want to speak about the proposed committee under the head of own your own home. During the past years we have all heard more or less the discussion on the subject of labor, on the subject of mechanics, clerks and all kinds of people owning their own homes, and

in some sections of the country propagandas to encourage owning their own homes has been started; but there has been no national movement looking to that end. Your Executive Committee believes that a most constructive and essential work in the interest of the industry can be accomplished by launching the proper sort of a campaign to that end. We do not believe the campaign should be launched until all of the details have been perfectly worked out in connection with it and until we have been able to enlist the support and the co-operation of the municipalities, if you please—of the cities and towns, of the commercial organizations, of the chambers of commerce, boards of trades throughout the country, in this work; because, after all, while we necessarily will approach it from a selfish standpoint, we obviously, if we do this work, will do it because we want to see people build their own homes in order that we may have the chance to build them for them, in order that we may have the chance to profit thereby.

Now, stripped of all of its technicalities, there are a number of corporations which have promised to get behind and develop such a program; and yet selfish as it is from our standpoint, I am very sure you will agree with me that nothing could be more in the interest of every community, every town, or city and State over this entire country, than the development of such a program; because the man who owns his own home is a good citizen. The man who has not owned his own home and then becomes the possessor of one, changes his mental attitude toward everything around him. He is then a part of that community; he has got his investment in that community; he is anchored to it, to an extent at least; and so, looking at it from the standpoint of the improvement of the citizenship of this country, no greater work and nothing of more benefit to the various communities and to the government itself could be undertaken than the promotion of such a campaign. And so it seems to your committee reasonable to suppose that we will be able to enlist in the support of this campaign all of the cities, towns and the other organizations I have spoken of. We believe we can get them back of us just so long as we keep it sufficiently general in its nature not to have the appearance of promoting any one individual interest."

* * *

THIS propaganda is favored and abetted by the resolution adopted by the Major Groups on Industrial Professions, including Architects, Contractors and Engineers, at the final sessions of the War Conference;

Whereas, When the United States

suddenly engaged in war, it was necessary to place large orders for ships, ordnance, munitions, and equipment, and these orders caused employers to add many thousands of workmen to their forces, thus creating an acute housing situation in many places that local agencies were unable to meet; and

Whereas, To relieve the situation the Government of the United States through various housing bureaus has constructed thousands of houses, a few completed but nearly all in a state of incompleteness, and consequently unoccupied; therefore, be it

Resolved, by this Conference, That all community and individual houses now under construction or complete should be disposed of in the most advantageous manner at the earliest possible moment.

Whereas, It is universally acknowledged that the safety of a nation lies in its homes—and there can be no doubt that in times of peace the greatest happiness of the nation is among contented home owners and in times of strife when our citizens are called upon to defend their country, the man who owns his home is inspired to fight much harder for his flag; therefore, be it

Resolved, That this Conference recommends and endorses a widespread sentiment in favor of home ownership as being thoroughly constructive and truly American.

* * *

BE PATIENT A LITTLE WHILE LONGER.

It will be a little while yet before the material markets are adjusted to the new conditions. In the meantime patience and forbearance will be virtues which it will be well to exercise. One manufacturer writes:

"There are undoubtedly many buyers throughout the country who have been more or less disgruntled on account of the poor service they have been able to get from manufacturers. It is probable that quite a number feel that the manufacturers are at fault, and that they have taken war business to the utter disregard of their old customers because of the possibility of making more profit.

"However, in a great majority of cases such a charge would be wholly unjust, as many manufacturers have given their entire facilities to war work because it has been necessary and practically required by the Government. Most manufacturers dislike very much to be unable to serve and thus hold in line their old customers, and it has been a sacrifice on their part to place their entire output with the Government."

This is a matter which will adjust itself quite rapidly, now that materials are being released for non-war work. Be patient!—*National Builder*.

Advance Construction News

CONTEMPLATED CONSTRUCTION; ARCHITECTS AND OWNERS; COST LIMIT; LAST DAYS FOR FILING BIDS; FIRMS FIGURING; CHARACTER OF MATERIAL AND EQUIPMENT REQUIRED: ADVANCE INFORMATION IN EVERY PHASE OF NEW CONSTRUCTION

Residence, Indiana avenue and Croskey street, Philadelphia. Architects, Wm. Steele & Sons Co., Sixteenth and Parkway, Philadelphia. Owner, Miss Sally Green, 69 Queen street, Germantown. Brick, 2 stories, 38x23 feet, slag roof, stone foundations, electric lighting. Architects taking bids, due as soon as possible. Lam Building Co., 1001 Wood street, additional bidders.

Fire House, Police Station, Boiler House and Stable, Twenty-fourth and Ritner streets, Philadelphia. Architect, Philip H. Johnson, 1713 Sansom street, Philadelphia. Owners, City of Philadelphia, Department of Public Safety, City Hall. Brick and concrete, limestone, granite and terra cotta, fireproof, 52½x46 feet; Boiler House and Stable, 1 story, 96x98 feet; Fire House, 2½ stories, 46x52½ feet, wing 46x103 feet, stone foundations, slate roof, cork brick, terrazzo, marble, tile, granolithic and wood block and wood floors (electric lighting, steam heating and plumbing reserved), marble and terrazzo work, rolled steel sash and skylights, steel doors, metal lockers, iron stairs, ornamental iron work, hollow tile, metal lath, safety treads, metal window guards, metal weatherstrips, waterproofing, dampproofing, wire screens, wire work. Architect taking bids, due December 27th. Wm. R. Dougherty, 1610 Sansom street, additional bidder.

Coal and Ash Handling Plant, Engine House, Spec. 3576, Navy Yard, Philadelphia. Architect, private plans. Owners, U. S. Government, care of Supply Officer, Navy Yard, Philadelphia. Excavation, concrete work, miscellaneous iron work, millwork. Low bidder, Wark & Co., 1737 Filbert street, \$9,435.

Oil House, west side of Fourth street, south of Terminal avenue, \$4,000. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Brick, 1 story, 22x32 feet, slag roof. Owners will build.

Dwellings (16), Northeast Boulevard and Langdon street, \$6,000 each. Architect, E. Allen Wilson, 1208 Chestnut street, Philadelphia. Owner, Samuel Shoemaker, Land Title Building, Philadelphia. Brick, 2 and 3 stories, 16 feet 4 inchesx15 feet, 20 feet and 27 feet, slag and slate roof, hot water heating, combination lighting. Owner will build.

Garage and Office Building (temporary), 1713-15 North Tenth street. Architect, private plans. Owners, John E. Sjostrom Co., Inc., 1719 North Tenth street. Brick, 2 stories, 32x55 feet, slag roof, wood floors, metal lath, mill work, plastering (heating and lighting reserved). Owners taking bids, due as soon as possible. Smith-Hardiman Co., 1606 Cherry street; Raith Const. Co., 304 Master street; Stacy Reeves & Son, 2011 Market street, and E. E. Hollenback, Inc., 1804 Brandywine st.; Hogg Construction Co., 1634 Sansom street; T. C. Trafford, 1613 Sansom street, are figuring.

Store (int. alts.), 703 Girard avenue, Phil-

adelphia. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner's name withheld. Millwork, plastering, glazing, painting. Architects taking bids, due as soon as possible. Lam Building Co., 1001 Wood street, is figuring.

Factory (alts.), northeast corner of Ninth and Spruce streets, Philadelphia. Architect, W. E. S. Dyer, Land Title Building, Philadelphia. Owners, Greenwald Bros., 247 South Third street, Philadelphia. Plumbing, composition floors, millwork, plastering and heating. H. H. Burrell, 206 South Juniper street, is taking revised sub-bids.

Residences, south side of Sansom street, between Forty-sixth and Forty-seventh streets. Architect, I. W. Levin, 536 Ritner street, Philadelphia. Owner, Nathan Raidman, 4737 Sansom street, Philadelphia. Brick (14), twin, 2 stories, 18x60 feet, slag and tile roof, hot water heating, combination lighting, tile and marble work, ornamental iron work, parquetry and hardwood floors, leaded glass; garages. Plans about completed. Owner will take sub-bids in about one week.

Residence (alts.), 505 Pine street, Philadelphia. Architect, I. W. Levin, 536 Ritner street, Philadelphia. Owner, Dr. I. Schechter, on premises. Brick, 3 stories, 18x50 feet, new brownstone front, hardwood floors, marble and tile work, hot water heating, electric lighting, millwork, leaded glass, metal skylights and cornice, plastering, painting, plumbing and fixtures. Plans completed. Owner will, be ready for bids in about one week.

Garage, 1316-18-20 South Ninth street, Phil-

adelphia, \$8,000. Architect, Herman H. Kline, 536 Mifflin street, Philadelphia. Owner, Frank R. Bilotta, Seventh and Christian streets. Brick, 2 stories, 46x70 feet, slag roof. Owner will build.

Tool House, Stone House Lane and Pollock street, \$1,500. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Frame, 1 story, 16x20 feet. Owners will build.

Temporary Tool House, Sixty-third and Glenmore avenue, \$1,200. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Frame, 1 story, 16x20 feet. Owners will build.

Apartment House (alt. and add.), West Philadelphia. Architect, E. H. Yardley, 1713 Sansom street, Philadelphia. Owner's name withheld. Brick addition, general alterations, new partitions, carpentry, hot water heating, electric lighting. Plans in progress. Too early for details.

Store (alts.), Eighth and Market streets, Philadelphia. Architect, private plans. Owners, Lit Brothers, Eighth and Market streets, Philadelphia. Plastering, painting, metal lath. John H. Gill & Son, Heed Building, are figuring.

Residence (alts.), 2011 Chestnut street, Philadelphia. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, Estate of Julien Shoemaker, 15 South Sixth street, Philadelphia. Interior alterations, plumbing, electric wiring and fixtures, interior decorating. Plans completed. Architects want sub-bids at once.

Contracts Awarded

Scope of Contract and Successful Bidders; "Inside" Information for the Material Man and Interior and Exterior Fitter.

Residence and Garage (add.), northwest corner of Thirty-third and Market streets, \$1,200. Architect, private plans. Owner, Wilhelmina Wiedmeier, on premises. Brick, 1 story, 9x16 feet, and 1 story, 10x12 feet, slag roof. Contract awarded to G. J. Reich, 1124 London street, Philadelphia.

Dwelling (2 family), 708 South street, Philadelphia (add.), \$3,000. Architect, private plans. Owner, Newmann Beard, 608 South Seventh street, Philadelphia. Brick, 3 stories, 16x42½ feet, slag roof. Contract awarded to D. Goldstein, northwest corner of Sixth and Jackson streets.

Club House (fire repairs), 4509 Lancaster avenue, \$875. Architect, private plans. Owner, Stephen Schuste, 4501 Lancaster avenue. Fire damage repairs. Contract awarded to Wesley Snyder, 407 North Thirty-second st., Philadelphia.

Residence (alts. and add.), Germantown avenue and Upsal street, \$3,000. Architect, private plans. Owner, Mrs. Thos. A. Cope, Main and Upsal streets, Germantown. Brick, 2 stories, 15x17½ feet, interior alterations. Contract awarded to L. W. Kitzelman, 125 East Upsal street.

Platform, Thirty-first and Chestnut streets, \$5,500. Architect, private plans. Owners, Pennsylvania R. R. Co., Broad Street Station, Philadelphia. Concrete. Contract awarded to Brann & Stuart, Commercial Trust Building.

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PENNSYLVANIA Construction News

Barn (alts.), near West Chester, Pa. Architect, E. C. May, du Pont Building, Wilmington, Del. Owner's name withheld. Alterations, new slate roof, sanitary equipment, new silo and dairy building. Plans in progress.

Barn (alts.), near Uniontown, Pa. Architect, E. C. May, du Pont Building, Wilmington, Del. Owner's name withheld. Alterations, new slate roof, sanitary equipment, new silo. Plans in progress.

Residence (alts. and add.), Ogontz, Pa. Architects, Magaziner & Eberhard, 603 Chestnut street, Philadelphia. Owner, Harry B. Hirsch, 2215 Green street, Philadelphia. Plans about completed. Architects ready for bids in one week.

Apartment Buildings (4), Latham Park, Pa. Architects, Simon & Simon, 249 South Juniper street, Philadelphia. Owners, Flanders Realty Co., Fifteenth and Walnut streets, Philadelphia. Brick, stone and stucco, 3 stories (6 family). Preliminary sketches being drawn. Too early for details.

Colony Building (remodeling), Gladwyn, Pa. Architects, Mills & Van Kirk, Harrison Building, Philadelphia. Owner, Dr. S. D. W. Ludlum, Colony, Gladwyn, Pa. General remodeling, 2 stories and 1 story. Portico, new roof, integral metal lath, cement plastering, enameled waterproofing, composition floors, hot water heating, electric lighting, special plumbing fixtures. Plans completed. Architects ready for sub-bids on all lines.

Marine Barracks, Fort Mifflin, Pa. Spec. 3514. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington. D. C. Brick, porch, interior alterations, tin roof. Owners taking bids, due December 30th. Monaghan & Losse, Inc., 3016 Chestnut street; J. M. Yardley, 1716 Sansom street, are figuring.

Post Office, State College, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington. D. C. Owner, U. S. Government, care of Treasury Department, Washington. D. C. Brick, steel and reinforced concrete, granite and limestone, 1 story, 50x80 feet, composition roof, concrete foundations, steam heating, electric lighting, marble and slate work, kalamain doors, iron stairs, cement and wood

floors, hollow tile, metal lath, metal weatherships, waterproofing, dampproofing. Owners taking bids, due January 9th. R. C. Ballinger & Co., 218 North Thirteenth street; H. H. Wehmeyer, 509 West Cumberland street, Philadelphia; Franco-American Const. Co., 150 Nassau street; Wills Egelhof Co., Inc., 101 Park avenue; Northeastern Const. Co., Fifth avenue and Twenty-sixth street; A. E. Beals Corp., 1170 Broadway, all of New York City; T. H. Mitchell, Salisbury, Md.; Piel Const. Co., Edmondson & Whitmore avenue, Baltimore; W. H. Fissell & Co., Marbridge Building, New York City; Olin Gerlach, Frostburg, Md.; The John W. Cowper Co., Buffalo, N. Y.; The Ohio Building and Const. Co., Cincinnati, Ohio, additional bidders.

Residences (6), Penfield, Pa. Architect, private plans. Owner, E. Oscar Lobb, Lanerch, Pa. Stone, shingle and Bisheprie wall board, 2½ stories, shingle roof, hot water heating, electric lighting, stone foundations, maple floors. Plans completed. Owner is ready for sub-bids.

Post Office, Sunbury, Pa. Architect, Jas. A. Wetmore, Treasury Department, Washington. D. C. Owners, U. S. Government, Treasury Department, Washington. D. C. Brick, reinforced concrete and stone, terra cotta, 1 story, 88x66 feet, composition and tin roof, concrete foundations, steam heating, electric lighting, marble and terrazzo work, cement floors, metal lath, safety treads, metal weathership, ornamental iron work, waterproofing, dampproofing, wire work. Owners taking bids, due January 20th at 3 P. M. Wills-Ludwick Co., 1706 Sansom street; F. A. Havens Co., 845 North Nineteenth street; F. G. Stewart, 1619 Sansom street; F. J. Boas, 201 North Broad street, and H. H. Wehmeyer, 509 West Cumberland street, Philadelphia, are figuring.

An old legend tells of a magician's vase; the magician could get out of it only that which he put in. Advertising is just that. If you don't get into it the "kick" of salesmanship it is going to miss by just that much the pulling power it ought to have.

New Jersey Construction News

Passenger and Freight Stations, Belle Meade, N. J. Architect, Samuel T. Wagner, Twelfth and Market streets, Philadelphia. Owners, Philadelphia and Reading R. R. Co., Reading Terminal, Philadelphia. Stone, brick, concrete and steel, 1½ stories, 20x150 feet; two cement and screening platforms, 400 feet long, wing 12x18 feet; Freight House, 1½ stories, 30x30 feet, slate and asbestos roof, concrete foundations, cement and yellow pine floors, tile and slate work, metal lath, metal window guards, iron work, hot air heating (track work, grading, outside stairways, macadam drives, screenings, scale, lighting reserved). Owners have received bids.

Post Office, Woodbury, N. J. Architect, Jas. A. Wetmore, Treasury Department, Washington. D. C. Owners, U. S. Government, care of Supervising Architect, Treasury Department. Brick and concrete, 2 stories, 59x64 feet, slag roof, concrete foundations, steam heating, electric light, tile, marble and terrazzo work, kalamain doors, cement floors, safety treads, waterproofing. Owners taking bids, due January 7th. Wm. Steele & Sons Co., Sixteenth and Parkway; Hogg Const. Co., 1634 Sansom street; Ketcham & McQuade, 1029 Brown st.; R. C. Ballinger & Co., 218 North Thirteenth street, Philadelphia; Connors Bros. Co., 15 W. Eighty-first street; Northeastern Const. Co., Fifth avenue and Twenty-sixth street; W. H. Fissell & Co., Marbridge Building; Thomas Dwyer, Broadway and 216 street; A. E. Beals Corp., 1170 Broadway; Norman Ker Co., 1123 Broadway; Rangeley Const. Co., 405 Lexington avenue; Vogel Cabinet Co., 259 West Thirtieth street, all of New York City; Namon Gewertz, 109 Palaski street, Brooklyn, N. Y.; Joseph B. Nest, Woodbury, N. J.; Cooper & Hadlow, Inc., Newark, N. J.; Piel Const. Co., Baltimore, Md.; Olin Gerlach, Frostburg, Md.; The Ohio Building and Const. Co., Cincinnati, Ohio; Michael Staub, Mamaroneck, N. Y., are figuring, in addition to those previously reported.

Time Clock and Pay Sheds, South Yard, Camden, N. J. Architect, private plans. Owners, New York Shipbuilding Co., Camden, N. J. Clapboard, 1 story, 69x112 feet, rubberoid roof, concrete floors, concrete footings. Owners taking bids. Wm. R. Dougherty, 1610 Sansom street; H. E. Baton, Presser Building, Philadelphia, are figuring.

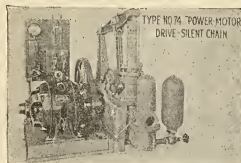
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Contracts Awarded

Coal and Oil Pier, Spec. 3560, Cape May, N. J., \$46,100. Architect, private plans. Owners, U. S. Government, care of C. W. Parks, Chief, Bureau of Yards and Docks, Navy Department, Washington, D. C. Timber construction, 488x24 feet, sheet iron coal chutes, plank floors, railroad tracks. Contract awarded to J. H. Terry & Co., Drexel Building, Philadelphia.

Post Office and Court House (alts.), Trenton, N. J., \$2,250. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, care of Supervising Architect, Treasury Department, Washington, D. C. Interior alterations and general repairs. Contract awarded to S. W. Mather & Sons, Greenwood and Canal streets, Trenton, N. J.

Proposals

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INVITATION FOR PROPOSALS.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., December 18, 1918.—Sealed Proposals will be opened in this office at 3 P. M. January 15, 1919, for miscellaneous changes in the United States Post Office building at Portsmouth, Va. Drawings and specifications may be obtained from the Custodian of the Building at Portsmouth, Va., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

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DELAWARE

Construction News

Hotel (alts. and add.), 802 Market street, Wilmington, Del., \$2,200. Architect, J. D. Thompson, Ford Building, Wilmington, Del. Owner, F. B. Nobis, on premises. New front, millwork, painting, glazing. Contract awarded to A. S. Reed & Bro., Wilmington, Del.

Stable, Eleventh and Grant streets, Wilmington, Del. Architects, Brown and White-side, du Pont Building, Wilmington, Del. Owners, Diamond Ice Co., 911 Market street, Wilmington, Del. Brick and frame, 100x36 feet, concrete foundations, asbestos shingle roof, concrete and wood floors. Contract awarded to J. E. Healy & Son, Wilmington, Del.

Garages (4), 213-15 West Twenty-fifth st., Wilmington, Del., \$1,000. Architect, private plans. Owner, J. W. Butler, on premises. Brick, 1 story, 10x20 feet, concrete foundations, slag roof. Owner will build.

Hotel (add.), 925 Shipley street, Wilmington, Del., \$4,000. Architect, private plans. Owner, C. J. Winkler, Tenth and Shipley streets, Wilmington, Del. Brick, 3 stories, 16x32 feet, slag roof. Contract awarded to C. J. Winkler, Tenth and Shipley streets.

Garage, 2702 Harrison street, Wilmington, Del., \$500. Architect, private plans. Owner, Leo Montgomery, Wilmington, Del. Brick, 1 story, 10x18 feet, slag roof. Contract awarded to G. H. Pandman, 403 Concord street, Wilmington, Del.

Garage, 1 East Thirty-first street, Wilmington, Del.

ton, Del., \$4,000. Architect, private plans. Owner, W. J. Thompson, 3102 Market street, Philadelphia. Brick, 1 story, 55x42½ feet, slag roof. Owner will build.

Restaurant (alts.), 410 Market street, Wilmington, Del., \$6,000. Architect, private plans. Owner, P. Liersies, on premises. New front and interior alterations, building 17x116 feet. Contract awarded to S. Lämpert, 47 West Thirty-fourth street, New York City.

Residence, northwest corner of Oak and Dupont street, Wilmington, \$5,000. Architect, private plans. Owner, Michael Gilmore, 419 South Rodney street, Wilmington, Del. Brick, 2 stories, 23x32 feet, slate roof, hot air heating, electric lighting, hardwood floors. Contract awarded to J. P. Beardon, 3 South Harrison street, Wilmington, Del.

Garage, Seventh and Broom streets, Wilmington, Del., \$5,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owner, L. Ford, on premises. Brick and concrete, 1 story, 25x30 feet, concrete foundations, concrete roof, hot air heating, electric lighting. Plans in progress.

Leather Factory (add.), Fourth and Monroe streets, Wilmington, \$10,000. Architect, J. J. Kennedy, Ford Building, Wilmington, Del. Owners, Standard Kid Co., on premises. Brick, 4 stories, 50x100 feet, slag roof, stone foundations, plank floors, electric lighting, steel sash. Plans in progress.

Permits for New Buildings

O is the abbreviation for owner. C is for contractor.

Philadelphia

Garage, 1932 South Woodstock street, \$400. C. E. Ebel (O), 2107 South Wood stock street. Brick, 1 story, 17x41 feet.

Dwellings (2), west side of Bensalem avenue, south of Red Lion Road, \$3,600. J. B. Miller (O), Bustleton, Pa. C. H. Weiss (C), 9512 Bustleton avenue. Frame, 3 stories, 16x40 feet and 12x7 feet, asbestos roof.

Stable and Shed, Bensalem Pike, south of Red Lion Road, \$2,000. J. B. Miller (O), Bustleton, Pa. C. H. Weiss (C), 9512 Bustleton Pike. Frame, 2 stories, 16x28 feet, 1 story, 16x36 feet.

Factory, 1508-14 North Mascher street, \$13,000. Frank H. Mills (O), 3518 Lancaster avenue. John E. Kearney (C), 327 North Sixty-

third street. Brick, 3 stories, 56x26 feet, 44x24 feet, 68x26 feet, slag roof, steam heating.

Platform, west side of Thirty-first street, south of Chestnut street, \$5,500. Pennsylvania R. R. Co. (O), Broad Street Station. Brann & Stuart (C), Commercial Trust Building. Concrete, 417 feet long.

Oil House, Fourth street, south of Terminal avenue, \$4,000. Pennsylvania R. R. Co. (O), Broad Street Station. Brick, 1 story, 22x32 feet, slag roof.

Dwellings (16), north side of Northeast Boulevard, north of Landon, \$6,000. Samuel Shoemaker (O), Land Title Building. Brick, 2 and 3 stories, 16x15 feet, 16x20 feet, 16x27 feet, slag and slate roof, hot water heating.

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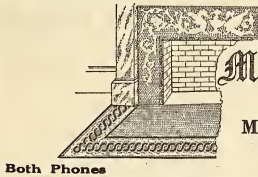
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PERMITS FOR Alterations and Additions

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Philadelphia

Store and Dwelling, 3251 Chatham street, \$3,000. Joseph Forish (O), on premises. Samuel Katz (C), 616 Morris street. Brick, 1 story, 18x14 feet, slag roof.

Shop and Office, northeast corner of Twenty-third and Walnut streets, \$1,000. Otto Gas Engine Co. (O), on premises. Fred A. Havens (C), 845 North Nineteenth street.

Porch Enclosure and alterations, southeast corner of Ruscomb and Canale streets. Wm. Gordan (O), on premises. J. Y. Loux (C), 3731 York Road.

Residence, 1630 Arch street, \$380. Grand Fraternity (O), 1622 Arch street. Harry R. Rust (C), 19 South Eighth street.

Heating, 4157-59 Lancaster avenue, \$400. John F. Rhodes (O), on premises. F. D. Haines (C), 4120 Lancaster avenue.

Tank Support, northeast corner of Forty-ninth and Market streets, \$1,000. Chilton Co. (O), on premises. A. H. Spenard (C), 822 Wood street.

Retaining Wall, 4901 Stenton avenue, \$450. Leeds & Northrup Co. (O), on premises. Stone, 100 feet long.

Dwelling, 1024 Wood street, \$500. Sarah H. Peoples (O), 1022 Wood street. C. F. Roeger (C), 51 North Hutchinson street.

Factory, southwest corner of Twenty-fourth and Wallace streets, \$900. Fairmount Dye Works (O), Twenty-fourth and Wallace sts. Rush J. Whiteside & Sons (C), 2115 Wallace street.

Store and Dwelling, 2227 South Fifth street, \$400. Nathan Nevenburg (O), Mt. Holly, N. J. Louis Dennis (C), 2227 South Fifth street, Flush bulk.

Garage, 1316-18-20 South Ninth street, \$8,000. Frank R. Billotta (O), Seventh and Christian streets. Brick, 2 stories, 46x70 feet, slag roof.

Dwelling, northwest corner of Germantown avenue and Upsal street, \$3,000. Mrs. Thos. A. Cope (O), Main and Upsal streets. L. W. Kitzelman (C), 125 East Upsal street. Brick, 2 stories, 12x17½ feet.

Storage and Factory, 1733 North Sixth st., \$1,500. McNeely Co. (O), 1732 Randolph st. Brick, alterations and repairs.

Two Family Dwelling, 708 South street, \$3,000. Newman Beard (O), 608 South Seventh street. David Goldstein (C), Sixth and Jackson streets. Brick, 3 stories, 16x42½ feet, slag roof.

Kitchen and Garage, northwest corner of Thirty-third and Market streets, \$1,200. Wilhelmina Wiedmeier (O), on premises. G. J. Reich (C), 1124 Loudon street. Brick, 1 story, 9x16 feet, 1 story, 10x12 feet, slag roof.

Club, 4509 Lancaster avenue, \$875. Stephen Schuste (O), 4501 Lancaster avenue. Wesley Snyder (C), 407 North Thirty-second street. Repair fire damage.

Dwelling, 501 West Mt. Pleasant avenue, \$400. Mrs. Wilson L. Gill (O), on premises. Repair fire damage, alterations to mansard roof.

Garage, southeast corner of Fifteenth and Shunk streets, \$500. Harry Leonard (O), 2534 South Fifteenth street. S. Berger (C), 1950 North Sixth street. Brick, 1 story, 8x16 feet.

Bank, southeast corner of Germantown avenue and Broad street, \$150,000. North Philadelphia Trust Co. (O), Germantown avenue and Airdrie street. A. R. Raff Cont. Co. (C), 1635 Thompson street. Limestone and granite, 3 stories, 58x105 feet, slag roof, steam heating.

Factory, 2305-07 North Eighth street, \$12,000. Patrick Corr & Sons (O), on premises. Wm. P. Koelle & Co. (O), Twenty-sixth and Oxford streets. Brick, 4 stories, 53x20 feet.

Shed and alterations, northeast corner of Twentieth and Indiana avenues, \$800. Frehofer Baking Co. (O), Twentieth and Indiana avenues. P. Haibach Cont. Co. (C), Twenty-sixth and Thompson streets. Frame, 30x102 feet.

Store and Dwelling, northeast corner of Thirtieth and Christian streets, \$1,050. Henry R. Nolte, on premises. Tony Brassi, 1141 Lynne street.

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Factory, 2525 Germantown avenue, \$600. Ritter (O), on premises. Harry Gill, Jr. (C), 2515 Germantown avenue.

Service Club, 207 South Twenty-second st., \$3,775. United Service Club (O), on premises. Conneen Const. Co. (C), 1737 Filbert street. Brick, 1 story, 17x33 feet, slag roof.

Store and Dwelling and two Family House, \$1,400. Nathan Stein, (O), 3404 Market street. Samuel Kohn (C), 4008 Poplar street.

Garage, north side of Rhawn street, east of Torresdale avenue, \$1,200. American Manganese Bronze Co. (O), Holmesburg, Pa. Edward T. Bender (C), 6014 Torresdale avenue. Frame, 1 story, 23x32 feet, rubberoid roof.

Garage, 1600 Ruffner street, \$1,000. Charles V. Kolb (O), 4231 Germantown avenue. John Christian (C), 4554 Mole street. Brick, 1 story, 60x20 feet.

Tool house, Glenmore avenue, west of Sixty-third street, \$1,200. Pennsylvania R. R. Co. (O), Broad Street Station. Frame, 1 story, 16x20 feet.

Tool House, Stone House Lane, south of Pollock street, \$1,500. Pennsylvania R. R. Co. (O), Broad Street Station. Frame, 1 story, 16x20 feet.

Foundry, northeast corner of Twenty-third and Carpenter streets, \$4,900. Philadelphia Roll and Machinery Co. (O), Twenty-fifth and Washington avenue. Belmont Iron Works (C), Twenty-second and Washington avenue. Iron on iron, 1 story, 63x35 feet.

Storage, 261 North Twenty-first street, \$400. Miss K. M. Sweeney (O), 214 North Seventeenth street. H. B. Boorse (C), 665 North Fifteenth street.

Club House, 418 West Leverington avenue, \$650. Germania Turn Verin (O), on premises. W. Rambo (C), 536 East Martin street. Brick, 1 story, 6x17 feet, tin roof.

Miscellaneous Construction News

Post Office, Long Island City, N. Y. Architect, Jas. A. Wetmore, Treasury Department, Washington, D. C. Owners, U. S. Government, Treasury Department, Washington, D. C. Brick, reinforced concrete, granite, limestone, 156x97 feet, composition roof, steam heating, electric lighting, tile, marble and terrazzo work, rolled steel sash, rolled steel skylights, kalamein doors, ornamenta iron work, metal lath, roof ventilators, metal window guards, metal weatherstrips, waterproofing, dampproofing. Owners taking bids, due January 15th. Charles McCaul Co., 1713 Sansom street, Philadelphia, is figuring.

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THE CHARM OF THE SMALL HOUSE

It is possible to consider the house as a box or a collection of boxes, in which human beings stow their bodies and their various activities during certain parts of the day and night. From a still more material point of view it may be considered as a combination of floors, walls and roof, designed to shut out the weather; or as a more or less scientific structure of certain materials assembled in such fashion as to defeat the force of gravitation. To many people a house is simply a place in which to sleep and eat one or more meals daily; while to others it is a device for making money.

If a house be no more than one or all of these things to a man, he is one to be most deeply pitied; he has missed many of the purest joys of life. For the real house is not its floors and walls and roof; its doors, windows and chimneys; its stone and brick and plaster and wood; its plan and its decoration. The real house is something of which these are but the outward, visible dress, the appanage and incidentals; the real house is the invisible soul, if we may so call it, contained in the material shell of its visible form. Like all immaterial verities underlying material things, it may take on a Protean variety of aspects: it may be a shrine, a temple, a castle, a bond, a present dream in absence; it may be an exclusive abode, shutting out the external world and all disturbing and confusing things; or again it may be widely inclusive, holding out, as it were, hospitable arms to gather into its embrace its many children, to welcome all the adepts of its special affections and possessions of the password of its particular friendship.

All this—the reality of the visible

house—is quite independent of the size, cost, location, material and form of the structure which encloses it. It is something greater and broader even than the idea of home, which of all familiar conceptions comes nearest to the wealth of meaning of the house and constitutes its richest and most precious element; but the house includes the home and enshrines it. Doubtless the home-idea is the inner and animating core of the house-idea; but not the whole of it. For one can conceive of the house that does not contain a home; but hardly of a home that is not enclosed in a house. Even the seaman's "home on the rolling deep" is bounded by the steel or wooden (or concrete) walls and decks of his ship, which constitute his house for the time being as well as his home. But the true idea of home gains full significance and realization only with the permanence of settled habitation in a house. It is the impermanence, the constant shifting and change of habitation inseparable from apartment-house existence in large cities, that makes the home-idea so weak in the flat. The flat-dweller does not speak of his "house" or his "home," unless it be in very exceptional cases, for to him the "flat" is neither. Its very name suggests only two dimensions in horizontal extension—and those two usually minuscule dimensions! The suppression of verticality in the housekeeping by the elimination of stairs is the chief, and almost the only, merit of this form of domicile, hence the appropriateness of the name of "flat"; how suggestive, too, of its squeezing out from the flat-dweller's life of a large part of the variety and spice of life in one's own house! And how often we hear of the mental

and moral revolt that comes in later life against the poverty and flatness of this existence, even when passed in those tenements which, calling themselves "first-class apartments," exact twice or thrice the rental of a first-class house, and under the guise of house service, rendered as an equivalent for exorbitant rentals, subject their inmates to the inescapable tyranny of janitors and uniformed flunkies, with hands incessantly held out for tips!

Is it not curious, by the way, to note that—in New York at least—the poor and middle-class (or shall we say "middle-wealth"?) families are driven from houses into flats by economic pressure, and the very wealthy by social pressure combined with the mercantile invasion of residence districts? Wearying of the burden of social exactions and of the administrative care of great houses, the wealthy house-dweller sells the house and moves into a \$20,000 Park Avenue apartment. The bank clerk or college professor gives up his house and occupies a flat, because he cannot afford longer to "run" even the most modest house, which, in the city, requires several servants to do what can be accomplished in a flat with one; or, as an alternative, a constant and wearing running up and down of many stairs. But in time both the millionaire and the hard-working wage-earner feel the loss of those rich elements of home-life which can be cultivated only in the house. The rich man takes refuge from the city flat-life by occupying for the summer or for half the year his villa or summer "cottage"—palace at Lenox or on Long Island or on the Maine coast; he must salt the flatness of existence in the city with the savor of a few weeks or months of independence in his own house. The wage-earner who has no such refuge in his possession, and inade-

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quate leisure to enjoy one if he had it, dreams of a happy day to come when he can retire from the dull routine of the office and flat, and in a modest cottage in New Jersey or in Westchester County, or perhaps in the New England or Middle West village from which he came, can cultivate his own little garden, swing his hammock on his own piazza, smoke his pipe by his own open fire, and gather about him under his own roof from time to time his scattered family and his special cronies and friends. It is a beautiful dream, not always realized; sometimes realized in part, sometimes in its full delightsomeness. But while it is dreamed, what an inspiration and stimulus it supplies to earnest labor! What a goal it sets before the laborer, to give value and significance to every hour of toil! What a reward it offers for present frugality and careful saving!

The great house has its fascinations: space, elegance, beautiful vistas, the elaboration of every refinement of luxurious comfort. In it the wealthy can surround themselves with the chosen environment, with pictures and bric-a-brac, rare carved furniture from ancient European palaces, trophies of sport, books in costly bindings, and create their own landscape about them by the skill of the landscape artist and the expenditure of great sums of money. They can shut out from sight every unpleasant or vulgar object, and forget the toiling, dirty-handed, working world outside, from whose honest labor so much of their luxury is drawn, and cultivate without disturbance whatever field of culture most attracts them.

But the great house has its price. One cannot live in luxury without a retinue of servants; and in a certain sense one is always the slave of those who serve

him. A great house is a great care as well as a source of huge expense: how often are men driven to bankruptcy by the ever-increasing budget of their great establishments? The great house means large and costly entertainments and a large and widely inclusive hospitality; a hospitality often conventional, based on a rigid debit and credit account of invitations given, received and returned. It is the splendid antithesis of the "simple life," the acme of polished, systematized and artificial existence; a huge investment with, too often, a miserably small return of unalloyed and rational pleasure. There are those, of course, for whom the great house is the splendid temple of the rites of a beautiful, holy, rational family life, of a simple, hearty, restful hospitality; the merited reward of a life of earnest work, whose benefits have been shared with those who helped create them, or have been bestowed freely on the less fortunate, or have been made otherwise helpful to humanity, but how few are these honored exceptions!

The little house need entail none of these anxieties and burdens. It may be made just large enough for one's modest means, and yet compass within these modest limits all the most sacred joys of life. There is no confining the expansion of the spirit within the cubic contents of any room, however large or small. One may commune with the choicest minds of the ages in a seven-by-ten room—Dr. Eliot says that a five-foot shelf may suffice for this purpose. The most wholesome and lovely family life may flourish for years in six or seven rooms. The fairest flowers of friendship may be cultivated in a cottage, and a beautiful hospitality be dispensed in the commuter's house on a 25-foot lot in the suburbs. The man and wife who

cultivate a tiny garden-plot of flowers in front of their house, and raise peas and corn in the lot behind, may extract from their modest eighth of an acre a keener joy and a richer satisfaction than the plutocrat from his Italian garden, his hothouses, prize orchids and army of gardeners. Truly, happiness is something poured in from without; dependent not on the multitude and costliness of one's possessions, but on the spirit and its attitude towards life. The little house may enshrine it as well as the palace.

To the artist, as an artist and not as a man earning his bread and butter by commissions on plans and superintendence, the little house offers problems as fascinating, and often as difficult, as any millionaire's palace.

It is true that one may draw plans and write specifications for a small house in short order and with but little thought. To put together six or seven rooms with the necessary hall, stairs and chimney-flues, so as to produce a habitable building, is within the powers of a tryo. But the little house with charm—that is another matter! The line that divides the artistic from the commonplace may be a tenuous line sometimes, but it is as real as the Arctic circle or the Equator, and there are many who have never been able to cross it. No formula will suffice to bridge the invisible gap between them. The imparting of charm cannot be taught in the class-room. The designer must have within him the instinct of the beautiful, a certain spark of inspiration which it is not extravagance to call divine. He must not merely possess a cultivated taste, that is, the quality of culture which enables him to discriminate instantly between the commonplace and the fine, the beautiful and the showy, the simple and the vulgar; he must be a creator, an originator of beauty, a distiller of the subtle aroma of charm from the alembic through which have passed all his impressions, learnings, acquisitions, dreams, contacts of and with the things of house-design. For some, this process of distillation is deliberate, even slow. They do not produce magically successful "first thoughts," but every house that issues from their plans has in it something unique, personal, delightful: it has

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charm. Others dream lovely dreams in waking hours and produce with happy audacity the material embodiments of these dreams. But whether deliberately or by seemingly instantaneous origination, the creator of charm in the small house is externalizing what already exists within him; there must be involution before evolution. This mysterious generation of inward visions of The House—visions which take Protean shapes in practice, and of which the architect is seldom conscious until he puts pencil to paper—takes us into a field of psychology and of the philosophy of esthetics in which I am not prepared to delve. Probably the most successful creator of charm in small houses would fail utterly to explain the process. He could not enumerate the elements of the artistic charm of his designs. That explains the futility of rules and formulæ for the production of charm.

Try it yourself. Pick out a dozen or a hundred photographs of small houses which appeal to you as charming—exteriors, interiors, details—houses from the country lanes of England, from French farmsteadings and villages, from New England by-ways; houses of stone, brick, half-timber, wood, stucco, tile and concrete; mingle with them the half-dozen houses of your own design, and then tell us what is the secret bond that unites them all in one family, the elusive common element that underlies all their diversified appeal. Their beauty is as varied as their materials, sizes and shapes. Some are merely picturesque; some are quaint; some you call distinctly beautiful. Some are delightful to look at from without, nestling comfortably and harmoniously in their surroundings; others you feel you would like to live in. Walls of red brick and gray stucco and mottled stone, with shingles of slate and thatch and tile; high rooms and low rooms, beamed ceilings and ceilings of plaster; diamond panes and large panes; big fireplaces and little ones; houses with porches, with piazzas, with balconies, with bay-windows, and houses with none of these things—how long the catalogue of the elements of their design and how subtle and evasive the laws by which these varied elements have been combined in each appealing whole! At best, one can name certain common qualities, but not any rule for producing them. Simplicity, harmony, fitness and sincerity are the cornerstone qualities, it seems to me, of their charm. Complexity and all appearance of labored picturesqueness must be absent from the small house.

Its arrangements should reveal thought, but not painful thought.

The house of real charm appears natural, almost inevitable; it seems to say, "Of course!" This quality of inevitableness, of naturalness, of obvious fitness to its place and its purpose may be, indeed, the result of much study and experiment, at any rate, of long experience; but the labored process of its production should never be in evidence. It is an old saying that "the highest art is to conceal art." To make this saying true one should interpret it to mean that the highest art is that which conceals the labor that brought it forth. The most finished style is that which seems most natural and spontaneous. Yet though one laughs at the art teacher who enjoined his pupils to "try hard to be spontaneous," one must not forget that "involution precedes evolution," and that spontaneity of expression requires first of all abundance of material, the possession of something to say worth the saying; and that a long process of acquisition, often laborious, and of digestion and discrimination, must precede the expression of what has been acquired.

The small house with charm has individuality. It may belong to a type with numerous exemplars, but it differs in subtle ways from all its congeners. As one rambles through the fishing towns and coastal farm villages of Maine, one encounters frequent examples of a type of house, one story high, low-set, shingled, with a central door and two windows on either side—the simplest possible solution of the rural house problem—yet beautiful with a rustic simplicity, a harmony of line and proportion that charms one by an insidious and evasive appeal. No two of these are exactly alike—that is part of the secret. Each has been an individual and personal expression, conforming to a perfectly common and familiar type, but having proportions, details of moldings, of door-paneling and window-trim, variations of roof-pitch and window-spacing, that impart to the whole its own individual and special character. It is like the difference between hand-made and machine-made furniture. The common type is pleasing, because it is a product of the country and its conditions. How different from the upstart, mechanical, prosperously ugly houses of the rural semi-rich of the same villages, which reproduce designs from plan-books published in Chicago or New York or Omaha or elsewhere!

The upshot of these considerations that I have somewhat ramblingly set forth seems to me to be this: the problem of the small house is well worth the architect's while. It even deserves a large measure of self-sacrifice on his part. To a busy architect, with many large commissions on hand, the small house makes little appeal; some offices refuse to touch it. This has always seemed to me a mistake, as if a great doctor should refuse to see a poor patient or a great divine decline to minister to a poor parishioner. Perhaps the policy is, after all, one of kindness to the smaller offices; but the kindness would be greater if the big offices shared their large commissions with the smaller offices, and did some of the little-house work themselves!

For, after all, there are a thousand small houses built for every large house, and the beauty and charm of the country at large depend far more on the character of the small houses than of the large ones. We have too many towns of palaces and slums, and too many semi-rural communities growing up with "handsome" streets of costly houses varying from sordid ugliness to pretentious ugliness. A small house of charm is an object lesson to all who pass by. Doubtless the average small house of today is a better house than that of forty or even twenty years ago. It is better planned, better built, more convenient and livable; and even commercial syndicates have begun to cater to an improved taste in houses. But there is yet a great work to be done in this field, and our architects are the men and women who must do this work, a work both of creation and of education. We need to fight the American love of display, the national passion for big things which neglects or despises the little things. We must do what we can to eradicate the popular notion that Art (spelt with a capital A) means something costly for the few, something showy to be bought and applied from the outside, instead of something inherent, an essential part of our living and thinking and doing, a quality as necessary and natural in little things as in big things; something of the fireside and home, not the "daubing with cost" of which Bacon complained in the days of Queen Bess. The cheapest small house may, after all, be a true work of art, the product of an architect's unselfish and consecrated talent, full of the charm of simplicity, fitness, harmony and sincerity, a dwelling-place worthy of beautiful lives and high and homely virtues.—*Architectural Record*.

TRIBUTE TO PHILADELPHIA.

Philadelphia has contributed nobly toward the successful winning of the world war, as the casualty lists show, but the casualties alone do not suffice to bring to our minds the great work the Quaker City has performed.

The direction of our armies and those of our allies would be fruitless unless supported by yeoman work of the many varied War Industries Boards, and of prime importance was the United States War Industries Board. Philadelphia was well represented on this Board, and as the *Washington Post* comments: "Early in December an interesting series of photographs was taken on the steps of the Red Cross Building, including the officers, members and affiliated officials of the building materials division of the War Industries Board." The assembling of the group was made the occasion of presenting to Richard L. Humphrey, Civil and Consulting Engineer of Philadelphia, Director of the division, by D. Knickerbocker Boyd, of the United States Housing Corporation, Architect from Philadelphia, an engrossed Resolution, complimenting him personally and praising his work for the war.

On this occasion Bernard M. Baruch, with Mr. Humphrey and Mr. Boyd were the center of the group. About them stood those who had assisted Mr. Humphrey, about 80 persons, including representatives of the army, the navy, the marine corps, the emergency fleet corporation, the United States housing corporation, the railroad administration, the supervising architect's office and members of Mr. Humphrey's office staff.

The text of the Resolution presented to Mr. Humphrey was signed by sixty-four representatives of the above-mentioned bodies and was "To Richard L. Humphrey, Director, Building Materials Division of the United States War Industries Board, 1918:

We, the undersigned, representatives of the several construction bureaus of the United States Government and members of your division, during the past war emergency, desire to express our appreciation of the great opportunity afforded us to be of service through being associated with you in the work so ably outlined and directed by you as Chief of the Building Materials Division.

The inspiration and enthusiasm imparted to all those serving under your leadership will long be cherished. The judicial character evidenced by you, and your untiring energy, patience and tact in the handling of the many trying problems presented during the transition of

the various building industries from a peace to an efficient war basis, has elicited our highest admiration.

The actions taken relative to conservation and standardization of building materials and methods, effected in such large measure through your personality, knowledge and experience, cannot fail to exert their helpful influence on the respective industries and prove of permanent value to the building interests of the country.

QUESTIONS FOR BUILDERS.

Of special interest to the building industry are the following questions taken from a group which have been suggested by the United States Chamber of Commerce for discussion at the War Service Committees conference at Atlantic City. On their wise answer and careful execution will depend the recovery which the building industry makes from the curtailment and restriction necessitated by the war:

What legal methods could be introduced to stabilize prices?

Have you any suggestions as to the continuation of the War Industries Board or any of its divisions during reconstruction, such boards having authority to control materials and regulate prices?

What control of materials during reconstruction could War Service Committees suggest to prevent over or under supply and avoid demoralizing the market? Should this be controlled by the crafts or by Governmental agencies?

What is the value of uniform methods of cost accounting for the individual manufacturer and the craft as a whole?

What suggestions of the Conservation Division to your craft might profitably be continued during reconstruction? What methods not already introduced would simplify production, save materials and eliminate wasteful practice without disturbing individual creativeness?

How can demobilized soldiers best be returned to industry and how will it affect the labor situation?

What suggestions to encourage building roads, pavements, sewers, water extensions, schools and other public work, and what of labor market?

Consider utilization or destruction of plants built for war purposes and location of convalescent and reconstruction hospitals.—*American Contractor*.

The "Guide" is published weekly. It comes to your office fifty-two times in a year for five dollars.

DECAY IN BUILDINGS.

Research was recently started by the Forest Products Laboratory to determine the "killing points" in temperature and humidity of common fungi found in American buildings. Field and laboratory studies indicate that much more care should be exercised in the selection of timber and in the construction of buildings to avoid conditions favorable to decay. A number of inspections of buildings which have given trouble on account of decay have shown that any one of the following causes may result in rapid deterioration of the building:

1. The use of green timber.
2. Allowing timber to get wet during construction.
3. Allowing the timber to absorb moisture after the building is finished because of leaks or lack of ventilation.
4. The use of timbers containing too much sapwood.
5. The use of timbers which have already started to decay.

The avoidance of these conditions will as a rule, it is said, prevent decay. In special cases, however, decay can only be prevented by preservative treatment. It is stated that for this purpose salts, such as zinc chloride and sodium fluoride, are better than creosote for buildings.—*Building Age*.

EUROPE WANTS READY-BUILT HOUSES.

The ready-built houses which have grown so popular in the United States are attracting attention abroad. John R. Walker, lumber trade commissioner abroad, sends this report to the United States Department of Commerce. France and England are both interested. Manufacturers of such houses are requested to send their printed announcement to the Department of Commerce for forwarding to Mr. Walker.

The valuable man in any business is the man who can and will co-operate with other men. The foreman who opposes the introduction of a new man into an institution and fights every innovation which he himself does not suggest, is doomed to a gradual and creeping defeat. Men succeed only as they utilize the services and ideas of other men. Co-operate!

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John B. Rulon.....1355 Colwyn st., Phila.

Artists' and Architects' Supplies.

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Warren-Knight Co.....136 N. 12th st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.
Blackboards.

William Moore Co.....1506 Sansom st., Phila.
Blue Prints.

Chas. H. Robbins.....1209 Arch st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Blue Print Paper.

Chas. H. Robbins.....1209 Arch st., Phila.
F. Weber & Co.....1125 Chestnut st., Phila.

Brick (Face, Etc.).

O. W. Ketcham.....Builders' Exchange, Phila.
Buildings.
Mitchell Bros.....2135 Race st., Phila.
Pemercy Const. Co.....1609 Ranshead st., Phila.

Builders' Supplies.

P. H. Fairlamb Co.....115 S. 36th st., Phila.
David France Co.,
Tasker st. wharf, Delaware River, Phila.
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P. H. Fairlamb Co.....115 S. 36th st., Phila.
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Lehigh Portland Cement Co.,
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Columns (Metal).

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The Barrett Company,
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Dampproofing.

The Barrett Co.....New York City and Phila.
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A. B. See Electric Elevator Co.,
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Metal Lathing Specialty Co.,
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Floor Plates.

Alan Wood Iron and Steel Co.,
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Furnaces and Ranges.

Borden Stove Co.....1311-13 Arch st., Phila.
Henry M. Miller.....46-48-50 N. 2d st., Phila.
Richardson and Boynton Co 1332 Arch st., Phila.

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Insurance Co. of North America,
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Light Iron Construction.

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Lumber.

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Marble Mosaic.

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Roman Mosaic and Tile Co, 435 Green st., Phila.

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Felton, Sibley & Co.....136 N. 4th st., Phila.

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Roofing Slate.

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Reserve for Taxes	-	-	950,000.00
Reserve for Sundries	-	-	160,000.00
Surplus	-	-	8,317,502.26

TOTAL

December 31, 1917

\$28,477,242.66

Surplus to Policyholders	-	-	\$ 12,317,502.26
Losses Paid Since Organization	-	-	192,518,273.33

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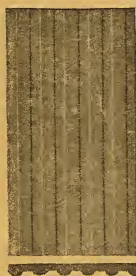
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